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Medical Procedural Terminology Systems: Development and Characteristics of Three Major Systems for Third Party Payment

Department of Health, Education & Welfare • Health Care Financing Administration

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ABSTRACT

Medical Procedural Terminology Systems were developed as an integral part of third party payment systems. Reimbursement of physicians by third parties on a fee-for-service basis required systematic communication as to services provided and fees. Three major national systems have evolved from the experience of a score or more years. This report examines all editions of the medical procedural terminology and coding systems published by the Blue Shield Association, the California Medical Association, and the American Medical Association. Although the three systems have much in common, they vary considerably in detail with resultant complications for national programs of record keeping, billing, and payment procedures incident to providing and paying for medical services. The principal similarities and differences among the three systems are identified. The historical development of these systems has been characterized by repeated expansion in the number of procedures due to the addition of new procedures to accommodate developments in medical practice and to the fractioning of many procedures, the result of more precise and more detailed descriptions. These and other systems developments are described in detail with primary focus on the six editions of the California Medical Association's Relative Value Studies.

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MEDICAL PROCEDURAL TERMINOLOGY SYSTEMS

Development and Characteristics of Three Major Systems used for Third Party Payment

This report is made pursuant to contract No. HCFA 500-78-0013 between the Health Care Financing Administration of the Department of Health, Education, and Welfare, and Moshman Associates, Inc.

The Project Officer for this contract was William J. Sobaski, a staff member within the Division of Reimbursement Studies, Office of Policy, Planning, and Research.

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MEDICAL PROCEDURAL TERMINOLOGY SYSTEMS

Development and Characteristics of Three Major Systems Used for Third Party Payment

INTRODUCTION

The development of the use of third party payment systems for reimbursing providers of medical services on a fee-for-service basis brought a need for systematic communication between the third parties and physicians in the matter of services rendered and fees. Initially developed primarily in connection with in-hospital surgery and related services, guides for third party payments for physicians' fees have been expanded to cover virtually the full range of medical services.

These guides have become known as Medical Procedural Terminology and Coding Systems. Their use is now an integral part of the payment systems of Medicare, Medicaid, other Federal programs, Blue Cross - Blue Shield Plans, and insurance company activities. The several systems in use have a number of general characteristics in common, yet they vary considerably in detail, with resultant complications for national programs of record keeping, billing, and payment procedures incident to providing and paying for medical services.

Out of the experience of a score or more years, three major national systems have been forged and refined. These systems are:

1. The National Association of Blue Shield Plans, (NABSP),* as represented by the Blue Shield Coding and Nomenclature Manual, a synthesis of many State or local Blue Shield systems, some of which date from the 1940's.

2. The California Relative Value Studies (CRVS), developed by the California Medical Association.

3. The Current Procedural Terminology (CPT), developed by the American Medical Association.

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* Renamed "Blue Shield Association" in 1978.

It should be noted that the carriers (Blue Shield Plans, or insurance companies), the actual paying agencies throughout the country, use their own procedure terminology systems or modify one of the national systems to meet what they conceive to be the local requirements of their areas. In practice, local systems are for the most part patterned after one of the national systems, most commonly Blue Shield 1971 or CRVS 1964, with updating.

Needless to say, terminology systems were not born full bloom in their present form; they have undergone development over a period of years.

DEVELOPMENT OF THE THREE SYSTEMS

The precursors of these three nationally used systems may, in a very real sense, be said to be the fee schedules developed by the various Blue Shield Plans in the 1940's. They established patterns of descriptors and categories that formed the initial basis for development of all the current systems.

The trail of the development of procedural systems has grown somewhat cold, and the precise timing of individual dates is obscure. Sobaski states:

> "The first relative-value study, published in 1949, is generally attributed to William Horton, M.D., of Connecticut. National studies have been performed by the Society of Actuaries, the National Association of Blue Shield Plans, and several medical specialty organizations, but most studies have been conducted by county or State medical societies. The first State medical society study was published by CMA in 1956."1/

Blue Shield Professional Services Index and Coding and Nomenclature Manual (NABSP)

The first Blue Shield Professional Services Index was issued in 1962. The Preface to the initial edition describes its genesis.

1/ Sobaski, William J., Effects of the 1969 California Relative Value Studies on Costs of Physician Services Under SMI., Health Insurance Statistics, U.S. DHEW Pub. No. (SSA) 75-11702, June 20, 1975.

"The Blue Shield Plans, in their Annual Business Meeting held in Chicago, April 16-18, 1961, directed the Committee on Professional Services to develop a Professional Services Index on which to base fee schedules for use in national accounts with employees located in more than one Plan area.

"The Index was developed from existing and accepted fee schedules of all the Blue Shield Plans in this country. It is a composite of all of these schedules and is derived from indices which were found to be inherent in each. The Index has five sections of procedures, each of which remains independent from the other. The five sections refer to Medical, Surgical, Anesthesia, Radiological, and Pathological Procedures. In addition, standard coding and nomenclature has been developed which encompasses all of the commonly performed procedures in each section.

"In brief, the method for deriving the Professional Services Index for each service consisted of the following successive steps:

1. The latest and best schedule for each Plan was obtained and the allowance for the studied service extracted.

2. The representative base for each type of professional service was selected and tested for reliability.

3. Mathematical relationships between the individual service and its base were obtained for each Plan. This relationship is referred to as a comparative factor.

4. The comparative factors thus developed were grouped into four categories: a. all Service Plans, b. all Indemnity Plans, c. all Plans having over 500,000 members, and d. Plans having schedules based upon relative value studies. The median comparative factor for each of the categories was then derived.

5. The median comparative factors in 4 above, were weighted to determine the composite Professional Services Index.

"IT IS IMPORTANT TO RECOGNIZE THAT THE PROFESSIONAL SERVICES INDEX IS SIMPLY AN INDEX OF RELATIONSHIPS AND DOES NOT IN ANY SENSE CONSTITUTE A PREPAID MEDICAL CARE CONTRACT. The use of the Index in developing a prepaid medical care contract requires that the material herein be supplemented with whatever maximums, limitations, and professional policies are indicated to provide the necessary underwriting control. This is accomplished in two steps as follows:

1. Mathematical conversion to schedules of the Blue Shield National Account Agreement which establishes unit values to covered procedures and relates them to any other procedure within a given section.

2. Application of a locally determined 'conversion factor' to the unit values assigned. The 'conversion factor' would be expected to vary from Plan to Plan to the same extent as fees for service vary from Plan area to Plan area."2/

This Index was developed, perhaps among other reasons, to assist the various Blue Shield agencies in meeting their cross-jurisdictional responsibilities for nationwide employers who offered all employees the same coverage either at home or in travel status.

For most of the coded and described procedures, a Professional Service Index was listed.

A second edition followed in 1964. The Preface to the second edition elaborates the basic concepts somewhat further, in part as follows:

"This second edition of the Professional Services Index was authorized by the Conference of Plans on April 4, 1964 at the Annual Business Meeting.

"It was the unanimous decision of the Professional Services Index Committee that a supplementary preface be provided in this edition to further clarify

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2/ National Association of Blue Shield Plans. Blue Shield Professional Services Index, with Unit Values. Chicago, Illinois, 1962.

the essential nature of the Professional Services Index, the purposes for which it was developed, and the manner in which it may be most useful to the Blue Shield Plans.

BASIC CONCEPT OF THE PROFESSIONAL SERVICES INDEX

"The Committee felt that the basic concept should be restated to achieve the most complete understanding possible of the advantages and limitations of the Index. In the simplest terms, the Professional Services Index is a valid statistical study of the relationships which existed between the payments made by all of the local Blue Shield Plans for the individual professional services rendered by practicing physicians during the period on which the study was based. This second edition is based on the information provided by the individual plans covering the payments made on their 'best' subscriber member contract as of the end of the year 1963. It sets forth on a post-facto basis the comparable levels at which professional services were paid for; it does not portend to indicate whether the existing relationships between the payments were optimal.

THE USE OF THE PROFESSIONAL SERVICES INDEX IN FEE SCHEDULE CONTRACTS

"The Index is intended to serve as a reference for all of those interested in the development of fee schedules by setting forth the relationship between payments which are currently being made for professional services by Blue Shield Plans. Those interested may determine whether or not such relationships are acceptable to them; if not, they should make appropriate changes in their local fee schedules. Eventually, through the methodology of the Index, such changes in local schedules will bring about Index relationships between procedures which they would consider more equitable.

"Many plans have used the Professional Services Index in its entirety as the basis of their local fee schedule by this simple application of a monetary unit value to the individual indices.

"Some plans have used the Professional Services Index as a reference to which they could compare the relationships which exist in their own fee schedules, and have modified in varying degrees the relationships in their own schedules to those demonstrated by the Index.

> "Either of these uses of the Index are in order as long as the Participating Physicians in the local plans understand the basic concept of the Index and its true nature as a post-facto study of professional payments. The Committee wishes to be clear, however, that participating physicians understand that the relationships set forth in the Index do not constitute any recommendations by the Committee or by the National Association of Blue Shield Plans, that these are the optimal, or the only relationships which should exist.
>
> "Some physicians will accept the relationships set forth in the Index as a basis for a fee schedule; others will not. The Index Committee presents the Index as a valid statistical study of the subject. Individual Blue Shield Plans are free to make such use of it as they wish."3/

Further work by representatives of various of the Blue Shield Plans and of the staff of the National Association of Blue Shield Plans resulted in the "1970 Blue Shield Procedure Code." This was shortly followed by "The 1971 Edition of the 1970 Blue Shield Coding and Nomenclature Manual." A system of replacement pages and errata sheets keeps the manual current.4/

The Professional Services Index was not included in the 1971 edition or the update sheets.

California Relative Value Studies (CRVS)

The first edition of the successive California Relative Value Studies (CRVS) was adopted by the Council of the California Medical Association on February 12, 1956. This edition represented the culmination of some three years of effort. To quote from the Introduction to the report of the Committee on Fees, which had been assigned responsibility for the project:

> "The objective of the Committee on Fees, which produced the report presented here, was to establish general principles for the formulation

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3/ National Association of Blue Shield Plans. Blue Shield Professional Services Index with Unit Values, 1964. Chicago, Illinois.

4/ National Association of Blue Shield Plans. Blue Shield Coding and Nomenclature - 1970. 1971 Edition.
National Association of Blue Shield Plans. 1971 Blue Shield Coding and Nomenclature Manual - Updated to January 1978. (Supplied by National Association of Blue Shield Plans, June 21, 1978.)

of proper fee schedules. The Committee determined that four elements must be included in such general principles:

1. Uniform Nomenclature: Description of medical services that should become common to all fee schedules was considered of paramount importance. The Committee therefore created a nomenclature suitable for uniform use.

2. Standardized Code System. So there might be a uniform code system to meet the needs of actuaries, statisticians and all others who need to work with fee schedules and who have reason to compare one schedule with another, a standardized code system was considered vital. Using the system created by the Blue Cross-Blue Shield Actuarial and Statistical Manual as a pattern, the Committee on Fees created a standard code system suitable for uniform use.

3. Relative Values. The establishment of a fee schedule with relative values expressed in dollars was first considered by the Committee. However, when this theory was projected to its probable practical applications, unsurmountable problems were encountered. The Committee created a list of relative values, which are not expressed in dollars.

4. Correct Segmentation. The Committee's final principle was to the effect that a proper fee schedule should be broken into four separate segments: (a) a section describing medical services and establishing relative values for medical procedures; (b) a similar section for surgical procedures; (c) one for radiological procedures; and (d) one for laboratory and pathological procedures. To use this Relative Value Schedule correctly and to avoid difficulty, the four separate sections should be considered and used separately at all times. At no time should relative values from one section be used to evaluate or to establish fees in another.

"These, then, were the basic principles and theories upon which this work was developed. Our thanks to the physicians who contributed to this study."[5/]

The Foreward to the Report added the following:

"FEES - Relationship of Values

Assignment and Techniques

"Since August 1952, the California Medical Association has repeatedly expressed the need for study of and information on the relative money-value of one medical service to another. For instance, if an appendectomy is worth "x" dollars, how much added to "x" would constitute a reasonable fee for a hysterectomy? To the best of our knowledge, no definitive study of this problem has ever been made.

"On March 10, 1953, the Commission on Medical Services of the California Medical Association appointed a subcommittee on Principles of Fee Schedules in order to develop this information, the purpose of which was to bring order out of several varieties of chaos:

1. The chaos of many county medical society fee studies, no two of which contained similar procedures, or similar nomenclature, and which were, therefore, not useful from a statewide point of view.

2. The chaos of some private insurance company fee schedules, which express no rational relationship between fees."[5/]

Continued study by the Committee on Fees led to a revision and updating that was adopted nearly two years later.[6/]

5/ California Medical Association. Relative Value Schedule. Adopted by the Council, February 12, 1956.

6/ California Medical Association. Relative Value Study. Adopted by the Council, November 10, 1957

A third, fourth, and fifth edition followed in 1960, 1964, and 1969, respectively.[7] An "Interim Pathology Supplement" was issued in 1972.[8] A fifth edition (revised) was issued in 1974, but was marked not for use in submitting claims prior to October 1, 1975.[7]

Current Procedural Terminology (CPT)

Just as the CRVS and Blue Shield Manual reached their current form by successive revisions, the Current Procedural Terminology of the American Medical Association has undergone several revisions. The Current Procedural Terminology, 1st Edition, was copyrighted in 1966. A second edition followed in 1970, a third in 1973, and a fourth in 1977.

As stated in the Foreword to the First Edition:

"FOREWORD

"Current Procedural Terminology (CPT) is a system of standard terms, provisional eponyms, and descriptors developed for the convenience of physicians and designated personnel to expedite the reporting of therapeutic and diagnostic procedures of surgery, medicine, obstetrics,

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[7] California Medical Association. 1960 Relative Value Studies. Third Edition, Adopted by the Council September 10, 1960.

California Medical Association. 1964 Relative Value Studies. Fourth Edition, Adopted by the Council August 8, 1964.

California Medical Association. 1969 Relative Value Studies. Fifth Edition, Adopted by the CMA Council May 10, 1969.

California Medical Association. 1974 Revision of the 1969 California Relative Value Studies. Fifth Edition (revised). Adopted by the CMA Council November 8, 1974.

[8] California Medical Association. Interim Pathology Supplement, 1969 California Relative Value Studies. San Francisco, 1972. (First printing August 1972, second printing June, 1973.)

psychiatry, roentgenology, clinical laboratory sciences, and physical medicine. The system also includes terms for supplementary and/or related services, as visits, consultations, examinations, evaluations, and miscellaneous studies and/or management. The names and codes were derived from the major systems of procedural terminology, current literature, and latest editions of textbooks, and coordinated to attain maximum uniformity and currency.

"A feature of CPT is the listing of terms alphabetically and numerically to provide simplified access to the names of procedures by term or code. The format, developed through the aegis of computer technology and varitype printing, permits detailed revision of content, a plan closely followed during the development of Current Medical Terminology (CMT), Third Edition.

"The system of CPT was evolved primarily from extended discussions of the Committee on Insurance and Prepayment Plans (CIPP) of the American Medical Association in concert with various groups eager to facilitate the reporting of therapeutic and diagnostic procedures as follows: the Executive Committee of the National Association of Blue Shield Plans (NABSP), emphasizing the need for a standard and effective system of procedural terminology; the Committee of Fees, California Medical Association, sponsors of the Relative Value Studies (CRVS), also advocating a unified system for the selection and/or use of terms and descriptors; representatives from State medical societies offering the benefits of extended experiences with CRVS and their own surveys and/or adaptations of relative value studies; suggestions for the incorporation of terms and codes from the College of American Pathologists (CPA), the American College of Radiology (ACR), and the American Society of Internal Medicine; the Health Insurance Council conveying important recommendations from the insurance industry; and suggestions from members of the U.S. Department of Health, Education, and Welfare, concerned with the need for the standardization of terminology for diagnosis and treatment. The Blue Shield Manual of Statistical Requirements was utilized in the development of CPT."9/

9/ American Medical Association. Current Procedural Terminology, First Edition, 1966.

It was inevitable that the development of these systems should involve considerable "cross-fertilization." The Blue Shield Preface quoted earlier states that the initial Index was developed as a composite of "Fee Schedules" of existing Blue Shield Plans. The California Medical Association 1956 edition foreword, already cited, refers to the use of the pattern developed by Blue Cross-Blue Shield nationally, and the American Medical Association credits input not only from the National Association of Blue Shield Plans and the California Medical Association (CRVS), but also from a broad representation of medical and insurance groups including the United States Department of Health, Education, and Welfare.

A point of importance will be evident from the origins described, namely, that the Blue Shield Manual is an insurer developed and controlled system, whereas, in contrast, the CRVS and CPT are physician developed and controlled.

A bird's-eye view of the general similarity in pattern, as well as some differences in number of procedures, is presented in Table 1. Summary of Medical Terminology Procedures, Three Systems. This is the pattern as it existed in the most recently published manual for each of the three systems. The similarity in overall organization by major medical service groupings and, within Surgery, by anatomical groups, is evident. A close similarity is also evident between the CPT and CRVS in number and distribution of procedures, as compared to the Blue Shield system which generally listed fewer procedures. These relationships are discussed in greater detail later in this report.

The chronological sequence of the various editions of the three Systems is summarized in Table 2. Although these dates identify the formal issuance of each new edition, a more or less continual updating occurs as the need arises. Presumably, as physicians report their professional activities in terms that do not translate into existing codes, new codes are established from time to time to permit reporting of the new procedures. Eventually the cumulative effects of these additions result in a decision to develop and publish a new edition.

TABLE 1:

Summary of Medical Terminology Procedures - Three Systems

	Blue Shield 1970 (updated through Jan. 1978)	CPT-4	CRVS 1974
Medicine	294	499	500
Surgery			
Integumentary System	192	302	275
Muskuloskeletal System	894	1,365	1,249
Respiratory System	161	196	171
Cardiovascular System	216	313	297
Hemic & Lymphatic System	32	31	34
Mediastinum & Diaphragm	15[1/]	20	19
Digestive System	427	573	494
Urinary System	194	263	262
Male Genital System	115	105	102
Female Genital System	147	135	137
Maternal Care and Delivery	63	48	57
Endocrine System	30	26	23
Nervous System	217	320	277
Eye and Ocular Adnexa	172	251	251
Auditory System	65	81	80
Radioimmunoassay	43		
	2,983	4,029	3,728
Radiology and Nuclear Medicine	409	604	421
Pathology and Laboratory	703	1,000	841
Grand Total	4,389	6,132	5,490
Anesthesia	-	8	74
Modifiers		18	36
Special Services and Billing Procedures		38	42

[1/] Mediastinum only.

TABLE 2:

Medical Procedural Terminology Manuals - Data of Successive Editions - Three Systems

California Relative Value Studies (CRVS)	American Medical Association Current Procedural Terminology (CPT)	National Association of Blue Shield Plans (NABSP)
Date of CMA Council Approval	Date of Copyright	Date of Copyright or identification
February 12, 1956 November 10, 1957		
September 10, 1960		
		1962[1]
August 8, 1964		1964[1]
	1966	
May 10, 1969		
	1970	1970[2] 1971[2]
	1973	
November 8, 1974		
	1977	Update to Jan. 1, 1978

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[1] Blue Shield Professional Services Index, with Unit Values.

[2] Blue Shield Coding and Nomenclature Manual.

CHANGING PRACTICE IN PROCEDURE DESCRIPTORS

Evaluation of the procedural terminology systems has disclosed various changes in number, classification, organization, and wording of procedural descriptions (descriptors) as well as in the numerical code systems. One of the most striking changes is in the number of procedures.

Growth in Number of Procedures

Although many Blue Shield Plans were operating in the 1940s, the first relative value study published by a State Medical Association appears to be the 1956 California Relative Value Studies. This study identified 1,831 coded procedures; the 1974 edition listed 5,490 - an expansion of 200 percent over an 18-year period. The Blue Shield Professional Services Index issued in 1962 listed 2,325 coded procedures, whereas its successor, the Blue Shield Coding and Nomenclature Manual, as updated to January 1, 1978, listed 4,389 - an increase of 89 percent over a 16-year period. The CPT listing increased 194 percent from 2,084 in 1966 to 6,132 in the 1978 edition, a period of 11 years (Table 3).

Considering the systems collectively, the number of procedures grew from just over 1,800 in 1956 and 1957, to between 2,000 and 2,500 in the early 1960's, and to four to six thousand in the most recent editions, depending on the system. This does not include the modifiers and special service and billing procedures introduced by CRVS and CPT in the latest editions, which materially expand the effective number of procedures.

Tables 4, 5, and 6 present the growth in the number of coded procedures, by major categories and first order subcategories, as carried in the several manuals. The roughly parallel growth in the three terminology systems is evident.

In the Blue Shield Professional Services Index (1962 and 1964) there were some very general guidelines for in-hospital medical care, but Blue Shield listed no specific coded procedures for Medicine until the 1970 Edition of the Coding and Nomenclature Manual. CRVS, on the other hand, listed coded procedures for Medicine in the 1956 edition, and CPT included coded procedures in Medicine in the first edition (1966). These closely resembled the 1964 CRVS, both in wording and in code numbers, with minor variations.

The longest series, CRVS, shows the largest proportional increase in number of procedures over the 1956-1974 period in Medicine - nearly 15-fold. By comparison the expansion in Surgery was 2.6 times, Radiology and Nuclear Medicine 2.3, and Pathology and Laboratory 4.2 times.

TABLE 3:

Number of Coded Procedures Listed in the Successive Editions of Procedural Manuals - Three Systems [1]

Coding and Terminology System	1956	1957	1960	1962	1964	1966	1969	1970	1973	1974	1977 & 1978
Blue Shield Coding and Nomenclature Manual [2]				2325	2436			4058			4389
California Relative Value Studies (CRVS) [3]	1831	1843	2117		2250		3623			5490	
Physicians' Current Procedural Terminology (CPT) [4]						2084		3449	5096		6132

[1] Excludes Anesthesia, Modifiers, and Administrative or Special Billing Procedures.

[2] National Association of Blue Shield Plans, 1962 and 1964 editions were titled: "Blue Shield Professional Services Index".

[3] California Medical Association.

[4] American Medical Association.

TABLE 4:

Number of Coded Procedures Listed in Successive Editions of Blue Shield Procedural Manuals by Medical Categories

Medical Categories	1962	1964	1970	1978 Update
Medicine	None[1]	None[1]	239	294
Surgery				
Integumentary System	93	99	189	192
Muskuloskeletal System	555	560	865	894
Respiratory System	129	131	155	161
Cardiovascular System	107	117	205	216
Hemic and Lymphatic Systems	26	27	32	32
Mediastinum	8	8	15	15
Digestive System	386	382	418	427
Urinary System	110	115	189	194
Male Genital System	91	92	114	115
Female Genital System	116	116	140	147
Maternity	17[2]	16[2]	59	63
Endocrine System	25	26	30	30
Nervous System	153	157	214	217
Eye & Ocular	155	155	161	172
Auditory	46	47	65	65
Radioimmunoassay				43
Total Surgery	2,017	2,048	2,851	2,983
Radiology	94[3]	None[1]	293	409
Diagnostic Examinations	214	388		
Pathology			675	703
Grand Total	2,325	2,436	4,058	4,389
Anesthesia	None	None	None	None
Modifiers	None	None	None	None

[1] No codes, but Professional Service Index Guides.

[2] Fetus and Fetal Situations extracted from Female Genital System.

[3] Plus PSI Guide.

TABLE 5:

Number of Coded Procedures Listed in Successive Editions of The CRVS Manuals by Medical Categories

Medical Categories	1956	1957	1960	1964	1969	1974
Medicine	34	36	124	143	244	500
Surgery (Assistants)	-	2	2	2	-	-
Integumentary System	70	71	104	130	189	275
Muskuloskeletal System	423	425	478	519	898	1,249
Respiratory System	99	96	117	115	128	171
Cardiovascular System	60	62	75	95	203	297
Hemic and Lymphatic System	9	9	11	15	22	34
Mediastinum and Diaphragm	6	6	6	7	16	19
Digestive System	231	237	268	254	308	494
Urinary System	88	88	100	103	175	262
Male Genital System	61	60	62	58	83	102
Female Genital System	93	90	93	89	106	137
Maternity	15	16	14	19	33	57
Endocrine System	11	11	19	19	21	23
Nervous System	103	104	110	114	175	277
Eye and Ocular Adnexa	116	114	115	110	115	251
Auditory	33	35	44	41	43	80
Total Surgery	1,418	1,426	1,618	1,690	2,515	3,728
Radiology and Nuclear Medicine	180	178	188	233	260	421
Pathology and Laboratory	199	203	187	184	604	841
Grand Total	1,831	1,843	2,117	2,250	3,623	5,490
Modifers	1	2	2	2	30	36
Anesthesia	1	-	-	-	-	74
Special Services and Billing Procedures	-	-	6	5	11	42

TABLE 6:

Number of Coded Procedures Listed in Successive Editions of Current Procedural Terminology (CPT) by Medical Category

Medical Categories	CPT-1 1966	CPT-2 1970	CPT-3 1973	CPT-4 1977
Medicine	161	239	426	499
Surgery				
Integumentary System	38	126	225	302
Muskuloskeletal System	466	898	1,214	1,365
Respiratory System	100	128	164	196
Cardiovascular System	64	204	301	313
Hemic and Lymphatic System	13	22	26	31
Mediastinum and Diaphragm	6	16	17	20
Digestive System	257	307	450	573
Urinary System	80	173	257	263
Male Genital System	59	84	102	105
Female Genital System	93	110	121	135
Maternity Care and Delivery	11	33	34	48
Endocrine System	25	21	21	26
Nervous System	92	91	250	320
Eye and Ocular Adnexa	107	120	241	251
Auditory	30	43	78	81
Total Surgery	1,441	2,376	3,501	4,029
Radiology	251	248	502	604
Pathology and Laboratory	231	586	667	1,000
Grand Total	2,084	3,449	5,096	6,132
Anesthesia				8
Modifiers				18
Administrative Services and Billing Procedures				38

It must be recalled that insurance during the 1940's and 1950's covered mainly in-hospital surgery, so that at the time the 1956 and 1957 CRVS were developed, a substantially larger body of procedures in Surgery were readily identifiable for purposes of third party payment. Medicine, on the other hand, lacked such an extensive elaboration of identifiable procedures. This phenomenon also no doubt explains in large part the far more dramatic recent increase in the number of procedures for Medicine than for other service groupings.

The earliest and the longest series of manuals available is the CRVS, and accordingly a detailed analysis of the progressive development of that system has been made. To a substantial degree, the pattern of development of the CRVS characterizes the other systems as well, with minor variations in details.

The change from the first to the second edition of the CRVS increased the total number of coded procedures only 0.6 percent, from the original 1,831 to 1,843. However, the Committee on Fees said in the Preface to the second edition, adopted by the Council on November 10, 1957:

> "It is encouraging to view the many uses to which the principle of the 'RVS' has been applied during the past year and a half. During that time, the Committee on Fees of the Commission on Medical Services of the CMA has had the Relative Value Study under continuous review. Several important omissions have been discovered; some duplication and an occasional error have come to light. Most important, however, is the recognition of changes in the practice of medicine and the development of new procedures and phases of medical practice which lend themselves to inclusion in this Study. These refinements -- in the areas of Pediatrics, Surgery, Radiology, and Pathology -- are incorporated in this second edition of the Study."1/

This statement seems to reflect a view that the changes and additions, though small in their effect on total number, were important, particularly in recognizing developments in medical practice.

1/ California Medical Association, op cit.

The third edition (1960) reflects a rather substantial expansion -- from 1,843 to 2,117, an increase of 15 percent. The Committee on Fees responsible for the revision explained in the Preface:

> "Three broad areas of revision were established early in our deliberations. First, we were to clarify, modernize, and augment the list of procedures carried out by physicians in terms of past experience and an advancing science. Second, we were to establish the relative values for each of these procedures based upon the findings of a survey of fees being charged by California physicians. Third, we were to so modify the method of presenting our findings as to minimize and, if possible, avoid the misinterpretations, misunderstandings, and misuses (purposeful or otherwise) of the Studies which have occasionally plagued the past."2/

The largest increase in number of coded procedures, 88, occurred in Medicine, and more than tripled the number that practitioners could cite in documenting their claims. The increases included separate additional coded procedures for Office Visits, Home Visits, and Hospital Visits, for Consultations, Immunization, and Therapeutic Injections, and for a substantial number of specific therapeutic and diagnostic procedures or services, most notably cardiovascular and pulmonary. Physical Medicine was recognized as a separate category for identifying a group of procedures. This edition incorporated six Other Services such as mileage, night, Sunday, or holiday calls, prolonged detention, and inpatient care.

In Surgery, the number of procedures increased from 1,426 to 1,618 (13%), with more procedures offered in nearly every anatomical division.

Thirty-three additional procedures were offered dealing with the Integumentary system, 53 with the Musculoskeletal, 31 with the Digestive, and 21 with the Respiratory systems, as well as smaller numbers in most others.

The 1964 edition increased the total number of listed procedures from 2,117 to 2,250. Major increases were in Medicine, surgery of the Integumentary, Musculoskeletal, and

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2/ California Medical Association, op cit.

Cardiovascular systems, and in Radiology and Nuclear Medicine. The 1964 edition brought the first recognition of "Nuclear Medicine" as an identifiable entity in the Manual by carrying "Nuclear Medicine" as a subtitle for "Radium and Radium Isotopes," a major subdivision of Radiology. Some of the procedures listed under "Nuclear Medicine" however, were not new and were simply reclassified under the new branch of medical therapy, in some cases with modified descriptors.

The 1969 edition brought substantial increases generally. Overall the increase was 61 percent; Medicine increased 71 percent; Surgery 49 percent; Pathology and Laboratory 228 percent; and Radiology and Nuclear Medicine 12 percent. This edition was issued shortly after the introduction of Medicare, and reflected the initial adjustment of the medical procedural terminology system to the Medicare reimbursement processes.

An increased number of surgical procedures was listed for every anatomical system. Procedures relating to the Cardiovascular System increased by 114 percent over 1964; those pertaining to the Musculoskeletal 73 and the Urinary System 70 percent. On the lower end of the scale, the Endocrine System procedures increased only 11 percent, from 19 to 21 procedures.

The expansion in number of procedures in Medicine from 1964 to 1969 arose in part from identifying new categories for Visits, in part from additional diagnostic and therapeutic procedures, and in part from transfer to certain diagnostic procedures previously listed in Surgery, together with general expansion in many categories. The former 9 Office Visit Procedures became 8 New Patient and 12 Established Patient separate procedures.

Eight procedure codes classed as Home or Nursing Home Visits in 1964 were replaced by (1) Convalescent, Rehabilitation or Long Term Care Services - New or Established Patients, 7 coded procedures; (2) Domiciliary or Custodial Care Services, New Patient, 4 coded procedures; and (3) Established Patient, 5 coded procedures.

Emergency Room Service, with 3 coded procedures for New Patients and 5 for Established Patients, was added as a Visits category.

The Monitoring Services were separately identified; further additions were made in Specific Therapeutic Procedures. Eight Specific Diagnostic Procedures relating to the ear were introduced.

Twenty-two Specific Diagnostic Ophthalmological Procedures were added to Medicine, in effect replacing 13 Diagnostic and Manipulative procedures carried under Surgery of the Eye in the 1964 edition.

Expansion in several subcategories, together with changes in descriptors, also occurred.

The 1974 edition doubled the number of coded procedures in Medicine, bringing the total number to 500. Additional procedures were listed throughout, with particular expansion in the Monitoring Services and Special Therapeutic and Specific Diagnostic procedures, notably the Ophthalmological, Otorhinolaryngological, and Pulmonary subcategories.

The number of Special Services and Billing Procedures applicable to Medicine was expanded to 27, and one Modifier was added, bringing the total number of Modifiers applicable to Medicine to 12. (The subject of Modifiers is discussed later in this report.)

The number of procedures for Surgery was again expanded by nearly 50 percent, with substantial increases occurring in every anatomical category.

The 1969 edition introduced the use of Modifiers, 30 in 1969 and 36 in 1974. As discussed more fully below, one effect of these Modifiers is to multiply the number of effective procedures for billing purposes by a factor on the order of between 2 and 3, since not all available modifiers were applicable or used with each procedure for each claim.

In addition, eleven Special Services and Billing Procedures were listed as a separate coding section, 99000-090 and 99170-199. These expanded and incorporated 4 of 5 Other Services previously included in the 9,070-075 series under Medicine. The fifth Other Service became one of the modifiers.

Types of Change in Procedural Descriptors

The increase in number of procedures has involved additions to accommodate new techniques. It has involved changes in the wording of descriptors, some major and some minor. It has involved fractioning, i.e., using two or more descriptors in place of a smaller number used previously.

To provide a closer look at the nature of the expansion, the Visits section of Medicine, and three anatomical sections of Surgery will be examined, first in terms of numbers of individual procedures, and then in terms of the equivalence of the descriptors, i.e., the specific wording of descriptors in selected sections.

Visits

The 1956 Edition identified 9 coded procedures under Visits and Examinations within the general category of Medical Services. The 1957 Edition added two relating to Well Baby Care. The 1960 Edition classified visits into Office, Home, and Hospital Visits, with 17 coded procedures. Only minor changes occurred in 1964, but the 1969 Edition, responding to the introduction of Medicare and a change in insurance payments (with coverage of most emergency room treatment as well as physician visits to facilities other than in-patient hospital), expanded the number of medical services to 61. This involved, among other things, further subdivisions for most places of encounter (New vs. Established Patients), Extended Care Facilities and Emergency Room Services. The 1974 Edition continued to show these subcategories and brought the total to 84. This included Infant, Child, and Adolescent care, which appear to have been included within the 1956 procedures, but were not consistently shown as separate categories.

Table 7 presents the progressive changes that have occurred in the category of Medicine identified as Visits. The table shows an expansion of 9-1/3 times from the 9 procedures listed in the 1956 CRVS to the 84 listed in the 1974 Edition. However, this is not as great as the expansion already identified for Medicine as a whole from 34 to 500, or 14.7 times. Of some interest is the fact that no one of the original descriptors used in the 1956 Edition survived to the 1974 Edition.

Under the category Visits and Examinations in 1956 a distinction was made between Office, Home, and Hospital Visits, and between first and follow-up visits for Office and Home but not for Hospital Visits. A procedure was listed for night home calls, for mileage beyond 10 mile radius, for additional family members or home calls, and for hospital care for premature infant.

The 1957 Edition added Hospital Night Calls to code 004 which initially covered only Home Night Calls; it changed the descriptor for code 006 from Follow-Up Office Call to Routine Office Call and added two procedures for well baby care, one for a single baby, the other for twins.

TABLE 7:

TABLE 7

Visits: Detailed Codes And Descriptors, Six Editions of CRVS

1956

VISITS AND EXAMINATIONS

1957

VISITS AND EXAMINATIONS

1960

OFFICE VISITS

HOME VISITS

HOSPITAL VISITS

INFANT CARE

1964

OFFICE VISITS

HOME or NURSING (CONVALESCENT) HOME VISITS

HOSPITAL VISITS

INFANT, CHILD and ADOLESCENT CARE

1969

Office Visits

Hospital Visits

Extended Care Facility, Convalescent Hospital, Nursing Home, and Boarding Home Visits

Convalescent, Rehabilitation or Long Term Care Services

Domiciliary or Custodial Care Services

Emergency Room Service

1974

Office Visits

Home Visits

Hospital Visits

Extended Care Facility, Convalescent Hospital, Nursing Home, and Boarding Home Visits

Convalescent, Rehabilitation or Long Term Care Services

Critical Care Services

Skilled Nursing Care (Extended Care) Facility Services

Nursing Home, Boarding Home, Domiciliary or Custodial Care Services

Emergency Care Facility Services

Infant, Child and Adolescent Care

Preventive Health Care

90560 *Intermediate* examination, evaluation and/or treatment, same or new illness

90570 *Extended* re-examination or re-evaluation

90589 Unlisted emergency care facility service

Infant, Child and Adolescent Care

Preventive Health Care

NEW PATIENT

90751 Initial history and examination related to the healthy individual, including anticipatory guidance, adolescent (age 12 through 17 years)

90752 late childhood (age 5 through 11 years)

90753 early childhood (age 1 through 4 years)

90754 infant (age under 1 year)

90755 Infant care to one year of age, with a maximum of 12 office visits during regular office hours, including tuberculin skin testing and immunization of DPT and oral polio

ESTABLISHED PATIENT

90761 Interval history and examination related to the healthy individual, including anticipatory guidance, periodic type of examination, adolescent (age 12 through 17 years)

90762 late childhood (age 5 through 11 years)

90763 early childhood (age 1 through 4 years)

90764 infant (age under 1 year)

(For counseling with parents and or patients [e.g., behavior problem, juvenile delinquency], see 90510-90515)

90773 Administration and interpretation of hearing tests (e.g., Guilmore), per 15 minutes

90774 Administration and interpretation of developmental tests (e.g., Denver, Sprigle)

90775 Complete evaluation of learning disorders, including school placement workup, recommendation of placement, report of findings and recommendations to the school and discussion of problem with parent and patients, but not including prolonged counseling

90776 Complex evaluation of learning disorders

These early editions contained procedure-distinguishing criteria that were continued and elaborated throughout following editions, namely: (1) place, (2) initial or follow-up visits (later New vs. Established Patients). They also identified the matter of infant care, which was handled in various ways in later editions, and Mileage, one of the first of a list of special items to develop later.

The 1960 Edition continued the place distinction (Office, Home, Hospital) and the class-of-patient distinction (New, Established), and added a third: level or intensity of service, e.g., Routine, Brief, Complete, Prolonged, etc. The first of the procedures under Office and Home were identical except for the place identification. The remainder varied slightly. The Hospital set of procedures used slightly different language, but utilized a level of intensity distinction. For Office and Hospital Visits a new distinction was identified, namely New Illness or Same Illness.

In the 1964 Edition, further changes occurred. Thus, for Office Visits the descriptor identified in 1960 by code 9001 was identified by code 9000 in 1964, although a total of nine procedures were retained. The simple two-line descriptor used for 9002 in 1960 was replaced in 1964 by two five-line descriptors, the first (9001) applying to an Established Patient or Minor Chronic Illness, and the second (9002) applying to New Patient or Major Illness; neither one provided a clear distinction from the other. Codes 9003 through 9007 had almost identical descriptors in both editions.

Code 9008 (1960) was dropped; code 9009 became 9008 (1964) and its descriptor was expanded while retaining its intent. Home Visits were classed with Nursing (Convalescent) Home Visits, and procedures were modified much as for Office Visits.

Hospital Visits carried over to 1964 with some changes; 9026 was dropped; 9027 was added and was identical to the former 9026 except that the qualification New Illness was dropped.

The 1969 Edition added three major categories for classification of visits, namely, Emergency Room Service; Extended Care Facility, Convalescent Hospital Nursing Home, and Boarding Home Visits; and Domiciliary or Custodial Care Services. In some categories the distinction between New and Established Patients was clearly maintained; in others it was somewhat blurred by including a group of procedures under New and Established Patient, but using Initial or Same or New Illness in the descriptor. Level of care was indicated in most visit

categories by various of the terms Brief, Minimal, Limited, Intermediate, Comprehensive, and Extended, thus initiating the use of these terms to define visit intensity. The number and selection of these terms varied by category. Also, for Office Visits, both New and Established Patients, an age breakdown was indicated: Adult, Adolescent, Late Childhood, Early Childhood, Infant.

In the 1974 Edition further changes were made in general categories. Office, Home, and Hospital Visits were retained but Critical Care Services were added with new code designations. Skilled Nursing Care (Extended Care) Facility Service was a breakout from the Extended Care Facility, Convalescent Hospital, Nursing Home, and Boarding Home Visits. Also, some new codes were added and some old ones were included in Nursing Home, Boarding Home, Domiciliary or Custodial Care Service. The latter represented a reclassification and breakout from the Extended Care Facility group. Also established was a new set of codes and descriptors for Infant, Child, Adolescent Care - Preventive Health Care, with new-Established Patient subcategories and age distinctions. Inclusion of Administration and Interpretation of Reading Tests, Administration and Interpretation of Developmental Tests, Complete Evaluation of Learning Disorders, and Complex Evaluation of Learning Disorders added a new dimension. Finally, in the Office Visits section of the numerical codes, two procedures were added under Diagnostic Problem or Challenge.

Throughout the six editions, changes in the Visits categories, not always systematic, have involved:

1. Fractionation, as among an increasing number of places of visit encountered, New as distinct from Established patients, Age of patient, Intensity of service;

2. Change of wording for approximately or roughly equivalent descriptors;

3. Change in numerical code for identical descriptors;

4. Change in classification and in the assignment of procedures to classes; and

5. Addition of new procedures for preventive health care for children and adolescents.

Expansion in number of coded procedures does not, of course, imply a larger number of visits by patients. It does however, offer to the physician the opportunity of describing in increased detail the type, intensity, and difficulty of the medical service provided.

Anesthesia

Anesthesiology is primarily an adjunct of Surgery. Consequently, reimbursement of Anesthesiologists for their services under third party payment systems derives from the surgical procedures requiring anesthesia. All three systems suggest essentially the same pattern for determining the Anesthesiologist's charge, namely a basic value charge related to the procedure plus a time charge.

For billing purposes, the procedure code is used with, in addition, either a Modifier which indicates an Anesthesiology service or a Type of Service Code to identify the charge as a charge for Anesthesia. Such additional codes distinguish it from a charge for Surgery, the procedure code for which would carry either no Modifier or one distinct from those used by Anesthesiologists. All three Systems specify that time units begin when the Anesthesiologist prepares the patient for Anesthesia and ends when he is no longer in constant attendance.

Blue Shield requires only a single Type of Service Code; CRVS and CPT-4 list a specific series of Modifiers applicable to Anesthesia, indicating different conditions or degrees of complexity, much as for surgical procedures generally.

Surgery

In the Surgery divisions, use of place of encounter, which added so many procedures to Medicine, is not a factor, and, as already noted, the expansion ratio is much smaller. With over a thousand procedures in Surgery, it is not practicable to examine each case of expansion or word change. Some examples will necessarily suffice.

-Integumentary System

The major sub-categories of the Integumentary System are:

1. Skin, Mucous Membrane, and Subcutaneous Tissue, and
2. Breast.

The changes in the wording of the title of the first of these over the years illustrates a shift in words with no apparent change in meaning.

1956 and 1957	Skin and Subcutaneous Areolar Tissue
1960	Skin, Subcutaneous, Areolar Tissues
1964	Skin, Mucous Membrane, Subcutaneous and Areolar Tissues
1969	Skin, Mucous Membrane, Subcutaneous and Areolar Tissues
1974	Skin, Mucous Membrane, and Subcutaneous Tissues

Table 8 presents a numerical analysis of the number and classification of coded procedures for the Integumentary System through the six editions of CRVS. The most obvious characteristics displayed are the four-fold expansion in total number from 70 to 275 and changes in the number of procedures listed for the categories that have been carried over the whole period. The second characteristic is the breaking of many of the original categories into subcategories, with attendant expansion. For example, Excision was carried in 1956 and 1957 with no subcategories for the included coded procedures. In 1960, most of these codes were classified under Excision and Simple Suturing, with the addition of a number of additional procedures in the same coding block (0171-0242).

The 1964 Edition reinstated Excision as a subcategory, but began the use of additional lower levels of classification, a process that continued in 1969 and 1974, with substantial expansion in number of procedures.

A more detailed look at the procedure level is presented in Table 9 which juxtaposes listings of the Incision section of Skin, Mucous Membrane, and Subcutaneous Tissue as then appeared in the six editions. The 1957 pattern simply duplicated 1956. In 1960, nine of the ten numerical codes listed in 1957 were retained, one (0114) was dropped, one was a new code (0103), and four (0109, 0126, 0141, and 0146) were added as a result of "fractioning" previous codes. Of the nine codes that were retained, only two (0115 and 0130) retained the identical verbatim descriptor used in 1957.

The following comparison of only the 1957 and 1960 listings for this Incision Section is instructive: The 1957 descriptors and codes are shown in regular type; if the identical wording and code are continued to 1960 they are shown in small regular type (example); if they are discontinued in 1960 they are enclosed in square brackets [ ]. In addition, the 1957 code, when continued to 1960 but with a modified descriptor, is shown in script *(example)*. A new code and its descriptor are shown in italics *(example)*.

*0101 Drainage of infected steatoma.....

*0101 *Incision and drainage of infected or non-infected sebaceous cysts (up to 5).....*

*0102 Drainage of furuncle.....

*0102 *Incision and drainage of furuncle*

*0103 *Acne surgery - marsupialization opening, or removal of multiple milia, comedones, cysts, pustules, etc.....*

*0108 Drainage of carbuncle.....

*0108 *Incision and drainage of carbuncle, hidradenitis suppurativa, and other cutaneous or subcutaneous abscesses, simple.....*

0109 *Extensive.....*

*0114 [Drainage of subcutaneous abscess (where not specified elsewhere)].....

*0115 Drainage of pilonidal cyst.....

*0125 Drainage of onychia or paronychia, with or without complete or partial evulsion of nail.....

*0125 *Drainage of onychia or paronychia.....*

0126 *multiple or complicated.*

*0130 Incision and removal of foreign body, subcutaneous tissues, simple.....

0131 Incision and removal of foreign body, complicated.....

0131 *complicated.....*

*0140 Drainage of hematoma.....

*0140 *Drainage of hematoma, simple*

0141 *complicated.....*

*0145 Puncture aspiration of abscess or hematoma.....

*0145 *Puncture aspiration of abscess or hematoma, primary.....*

*0146 *subsequent.....*

TABLE 8:

Number of Coded Procedures for Integumentary Systems - Six Editions, CRVS

Anatomical System and Class of Procedure	1956	1957	1960	1964	1969	1974
Integumentary System skin, mucous membrane, and subcutaneous (areolar) tissues						
Incision	10	10	14	13	16	17
Excision	12	11				
Debridement				5	3	3
Paring or Curettement						3
Excision and simple (direct) closure				18	1	2
Benign lesions					12	20
Malignant lesions					10	18
Nails					8	11
Miscellaneous					3	3
Excision and simple suturing			26			
Introduction			1	2	2	9
Repair						
Simple		3	3	2	9	13
Direct closure - linear repair					11	
Plastic surgery	8	8				
Eyelid, full thickness				5	7	
Intermediate						19
Complex			6	20		12
Adjacent tissue transfer or rearrangement					9	10
Grafts	19	20	24	9		
Free skin grafts					14	16
Pedicle flaps				25	17	22
Other grafts					6	6
Miscellaneous procedures					13	20
Decubitus ulcers						10
Burns, local treatment	6	6	6	6	6	7
Destruction	4	2	11	11	17	19
Breast						
Incision	2	2	2	2	2	3
Excision	9	9	11	12	18	22
Repair					5	10
Total Integumentary System	70	71	104	130	189	275

Incision Section: Skin, Mucous Membrane, and Subcutaneous Tissues, Six Editions of CRVS

1956

Incision

0101 Drainage of infected steatoma.....
0102 Drainage of furuncle .....
0108 Drainage of carbuncle .....
0114 Drainage of subcutaneous abscess (where not specified elsewhere) .....
0115 Drainage of pilonidal cyst.....
0125 Drainage of onychia or paronychia, with or without complete or partial evulsion of nail....
0130 Incision and removal of foreign body, subcutaneous tissues, simple .....
0131 Incision and removal of foreign body, complicated .....
0140 Drainage of hematoma .....
0145 Puncture aspiration of abscess or hematoma....

1960

Incision

0101 Incision and drainage of infected or non-infected sebaceous cysts (up to 5).....
0102 Incision and drainage of furuncle
0103 Acne surgery—marsupialization opening, or removal of multiple milia, comedones, cysts, pustules, etc. .....
0108 Incision and drainage of carbuncle, hidradenitis suppurativa, and other cutaneous or subcutaneous abscesses, simple .....
0109 extensive .....
0115 Drainage of pilonidal cyst.....
0125 Drainage of onychia or paronychia .....
0126 multiple or complicated..
0130 Incision and removal of foreign body, subcutaneous tissues, simple .....
0131 complicated .....
0140 Drainage of hematoma, simple.
0141 complicated .....
0145 Puncture aspiration of abscess or hematoma, primary .....
0146 subsequent .....

1969

INCISION

10000 Incision and drainage of infected or non-infected sebaceous cyst, one lesion .....
10001 second lesion.....
10002 over two, each additional lesion
10020 Incision and drainage of furuncle
10040 Acne surgery: marsupialization, opening, or removal of multiple milia, comedones, cysts, pustules, etc. .....
10060 Incision and drainage of abscess (e.g., carbuncle, suppurative hidradenitis and other cutaneous or subcutaneous abscesses), simple
10061 complicated .....
10080 Drainage of pilonidal cyst, simple
10081 complicated .....
10100 Drainage of onychia or paronychia .....
10101 multiple or complicated .....
10120 Incision and removal of foreign body, subcutaneous tissues, simple .....
10121 complicated .....
10140 Drainage of hematoma, simple ...
10141 complicated .....
10160 Puncture aspiration of abscess or hematoma .....

1957

Incision

0101 Drainage of infected steatoma.....
0102 Drainage of furuncle .....
0108 Drainage of carbuncle .....
0114 Drainage of subcutaneous abscess (where not specified elsewhere) .....
0115 Drainage of pilonidal cyst.....
0125 Drainage of onychia or paronychia, with or without complete or partial evulsion of nail .....
0130 Incision and removal of foreign body, subcutaneous tissues, simple .....
0131 Incision and removal of foreign body, complicated .....
0140 Drainage of hematoma.....
0145 Puncture aspiration of abscess or hematoma .....

1964

Incision

0101 Incision and drainage of infected or non-infected sebaceous cyst .....
(2nd lesion 50%; each additional lesion 25%)
0102 Incision and drainage of furuncle .....
0103 Acne surgery; marsupialization, opening, or removal of multiple milia, comedones, cysts, pustules, etc. .....
0108 Incision and drainage of carbuncle, suppurative hidradenitis and other cutaneous or subcutaneous abscesses, simple .....
0109 extensive .....
0115 Drainage of pilonidal cyst.....
0125 Drainage of onychia or paronychia .....
0126 multiple or complicated.
0130 Incision and removal of foreign body, subcutaneous tissues, simple .....
0131 complicated .....
0140 Drainage of hematoma, simple
0141 complicated .....
0145 Puncture aspiration of abscess or hematoma .....

1974

INCISION

10000 Incision and drainage of infected or non-infected sebaceous cyst, one lesion.....
10001 second lesion.....
10002 over two, each additional lesion
10003 Incision and drainage of infected or non-infected epithelial inclusion cyst ("sebaceous cyst") with complete removal of sac and treatment of cavity.....
(For excision, see 11400 et seq.)
10020 Incision and drainage of furuncle
10040 Acne surgery (e.g., marsupialization, opening, or removal of multiple milia, comedones, cysts, pustules).....
10060 Incision and drainage of abscess (e.g., carbuncle, suppurative hidradentis and other cutaneous or subcutaneous abscesses), simple.....
10061 complicated.....
10080 Drainage of pilonidal cyst, simple
10081 complicated.....
(For excision of pilonidal cyst, see 11770, 11771, 11772)
10100 Drainage of onychia or paronychia
10101 multiple or complicated.....
10120 Incision and removal of foreign body, subcutaneous tissues, simple
10121 complicated.....
10140 Drainage of hematoma, simple...
10141 complicated.....
10160 Puncture aspiration of abscess,

The example could be extended but the pattern is clear. In some cases, the description of a former code is revised, and one or more new codes added. Occasionally, an old code is dropped, presumably superceded by one or more new codes. But the overriding effect is an increase in the number of coded procedures.

The increase of one procedure from 1969 to 1974 was the result of elaborating upon the procedure described as 10000 to add 10003 (Table 9).

Of the 17 coded procedures listed in 1974, only code 10120, Incision and Removal of Foreign Body, Subcutaneous Tissues, simple, finds its exact match in 1956 (Code 0130).

For Breast, the second category under Skin, Mucous Membrane, and Subcutaneous Tissues, the surgical categories Incision and Excision sufficed through 1964. Incision of the Breast carried only two procedures until expansion to three in 1974 (Table 8). The expansion consisted of fractioning 1969 Code 19000, Aspiration of Cyst to 1974 Codes 19000 Aspiration of Cyst, and 19001 Each Additional Cyst. Excision of the Breast, however, expanded in number of procedures from 9 to 22. Also in 1969, Repair was added with 5 procedures. This was expanded to 10 in 1974 .

Table 10 presents the listings under Excision for Breast in 1964, 1969, and 1974, and Table 11 lists the Repair procedures for 1969 and 1974. The change from a 4-digit to a 5-digit code came in 1969.

The changes from 1964 to 1969 in Excision-Breast resulted in a new increase of 6 coded procedures (Table 10). An item by item comparison shows:

- seven codes were retained with substantially equivalent wording;
- three codes were added through fractioning previous codes;
- eight codes were added as essentially new procedures; and
- five codes were dropped from the subcategory Excision by transferring them to the subcategory Repair, which had not been used for Breast previously although it was commonly used for various anatomical entities.

TABLE 10:

Excision Section: Breast - Three Editions of CRVS

1964

Excision

0441 Biopsy of breast .....
0444 Excision of cyst, fibro-adenoma or other benign tumor, aberrant breast tissue, duct lesion (Including gynecomastia) or nipple lesion (including any other partial mastectomy) male or female, unilateral .....
0445 bilateral .....
0446 Excision of chest wall tumor involving ribs .....
0447 Excision of chest wall tumor involving ribs plus plastic reconstruction .....
0467 Complete (simple) mastectomy
0470 Radical mastectomy, including breast, pectoral muscles and axillary lymph nodes .....
0481 Mammoplasty, plastic operation on breasts, reduction or repositioning, bilateral, one stage ...
0482 two stage .....by r
0483 augmentation, prosthetic, unilateral .....
0484 bilateral .....
0485 derma-fat fascia, unilateral .....

1969

EXCISION

19100 Biopsy of breast, needle (independent procedure) .....
19101 incisional .....
19120 Excision of cyst, fibro-adenoma or other benign tumor, aberrant breast tissue, duct lesion or nipple lesion (except 19140-19161) male or female, unilateral .....
19121 bilateral .....
19140 Mastectomy for gynecomastia through circumareolar incision, unilateral .....
19141 bilateral .....
19160 Partial mastectomy (quadrectomy or more), unilateral .....
19161 bilateral .....
19180 Simple mastectomy, complete, unilateral .....
(For gynecomastia, see 19140, 19141)
19182 subcutaneous, unilateral .....
19184 with immediate prosthetic implant .....
(For supplemental skills of two surgeons, see rule 8, page 27 and modifier -62)
19186 delayed prosthetic implant, unilateral .....
19187 bilateral .....
19200 Radical mastectomy, including breast, pectoral muscles and axillary lymph nodes, unilateral .....
19210 including internal mammary lymph nodes (Urban type procedure) .....
19240 Modified radical mastectomy, with modified axillary dissection but leaving pectoral muscles, unilateral .....
19260 Excision of chest wall tumor involving ribs .....
19270 Excision of chest wall tumor involving ribs plus plastic reconstruction, with or without mediastinal lymphadenectomy .....

1974

EXCISION

19100 Biopsy of breast, needle (independent procedure).....
19101 incisional.....
19120 Excision of cyst, fibro-adenoma or other benign tumor, aberrant breast tissue, duct lesion or nipple lesion (except 19140-19161) male or female, one or more lesions, unilateral.....
19121 bilateral.....
19140 Mastectomy for gynecomastia through circumareolar or other incision, unilateral.....
19141 bilateral.....
19160 Mastectomy, partial (quadrectomy or more), unilateral.....
19161 bilateral.....
19180 Mastectomy, simple, complete, unilateral.....
19181 bilateral.....
19182 Mastectomy, subcutaneous, unilateral.....
19183 bilateral.....
19184 with immediate prosthetic implant, unilateral .....
(For supplemental skills of two surgeons, see Surgery ground rule 7 and modifier -62)
19185 bilateral.....
19186 delayed prosthetic implant, unilateral.....
19187 bilateral.....
(For reporting cost of implants, see 99070)
19200 Mastectomy, radical, including breast, pectoral muscles and axillary lymph nodes, unilateral.....
19210 including internal mammary lymph nodes (Urban type procedure).....
19240 Mastectomy, modified radical, with modified axillary dissection but leaving pectoral muscles, unilateral
19260 Excision of chest wall tumor including ribs.....
19271 Excision of chest wall tumor including ribs with plastic reconstruction, without mediastinal lymphadenectomy .....
19272 with mediastinal lymphadenectomy.....

TABLE 11:

Repair Section: Breast - Two Editions of CRVS

1969

REPAIR

19300 Mammoplasty, plastic operation on breasts, reduction or repositioning, bilateral, one stage .....

19301 two stage .....

19310 augmentation, prosthetic (except 19184-19187), unilateral

19311 bilateral .....

19320 derma-fat fascia, unilateral ...

1974

REPAIR

19305 Mammoplasty, plastic operation on breasts, reduction or repositioning, one stage operation, unilateral....

19306 bilateral.....

19307 two stage operation, unilateral..

19308 bilateral.....

19310 Mammoplasty, augmentation, prosthetic (not including implants), unilateral.....

19311 bilateral.....

(For reporting cost of implants, see 99070)

(For mastectomy with prosthetic implant, immediate or delayed, see 19184-19187)

19330 Removal of mammary implant material by different surgeon, unilateral.....

19331 bilateral.....

19350 Reconstruction of nipple and/or areola, including labial or other grafts.. .....

19499 Unlisted procedure, breast.....

The net change from 1969 to 1974 in Excision of the Breast was an increase of 4 coded procedures, all the result of fractioning some of those listed in 1969.

Codes 19181, 19183, 19185 added codes for Bilateral to 3 procedures previously described as Unilateral. Codes 19271 and 19272 replaced 19270 by showing "with" and "without" mediastinal lymphadenectomy as separate procedures.

The remaining 18 procedures were carried forward to 1974 without change.

-Respiratory System

Most of the procedure categories for the Respiratory System identified in the 1956 Edition were continued throughout the series and there have been few changes in the categories. The numerical pattern of the growth of the number of procedures for the Respiratory System is summarized in Table 12. Shifting in the procedure content of some categories is evident. For example, Endoscopy of the Nose carried 2 or 3 procedures through 1969, but in 1974, none were shown. However, 3 generally similar procedures were shown under Removal of Foreign Bodies, using the same codes, but with some change in wording reflecting some changes in the technique of removing foreign objects.

Similarly, several procedures under Nose were classed as Manipulation from 1956 to 1969, but none were shown in 1974. Most of the codes previously classed as Manipulation were classed as Other Procedures in 1974 with some additions and some changes in the wording of the descriptors.

Another type of change occurred in the Larynx section. The Incision subcategory in the 1956 and 1957 Editions listed one coded procedure; the 1960 and 1964 Editions listed four. However, the 1969 Edition dropped Incision as a category, and transferred most of the former Incision procedures to the Excision section, with some wording changes and a fractionation.

The 1969 Excision section contained eleven coded procedures, (See Table 13) as follows:

- Three continued from the 1964 Excision section with descriptors unchanged (31360, 31400, 31420, from 2051, 2056, and 2057 respectively);

TABLE 12:

Respiratory System: Number of Procedures by Category - Six Editions of CRVS

Respiratory System	1956	1957	1960	1964	1969	1974
Nose						
Incision	2	2	2	2	2	2
Excision	8	8	8	6	6	12
Introduction					1	2
Endoscopy	3	2	2	2	3	
Removal of Foreign Bodies						3
Repair	5	5	13	12	14	15
Destruction	1	1	1	1	2	2
Manipulation	5	4	5	4	4	
Other Procedures						6
	(24)	(22)	(31)	(27)	(32)	(42)
Accessory Sinuses						
Incision	8	8	11	12	11	16
Excision	3	3	3	3	3	5
Suture	2	2				
Other Procedures						2
	(13)	(13)	(14)	(15)	(14)	(23)
Larynx						
Incision	1	1	4	4	0	0
Excision	5	5	6	6	11	14
Introduction	2	2	3	3	1	1
Endoscopy	7	6	7	7	10	18
Repair					1	6
	(15)	(14)	(20)	(20)	(23)	(39)
Trachia and Bronchi						
Incision	1	1	2	2	3	2
Endoscopy	11	11	11	11	10	9
Repair	5	5	5	5	5	7
Suture	4	4	4	5	4	5
Introduction					2	7
	(21)	(21)	(22)	(23)	(24)	(30)
Lungs and Pleura						
Incision	13	13	14	14	15	12
Excision	4	4	6	6	10	13
Endoscopy	3	3	3	3	3	2
Repair					0	3
Surgical Collapse Therapy-Thorocoplasty	6	6	7	7	7	7
	(26)	(26)	(30)	(30)	(35)	(37)
Total - Respiratory System	99	96	117	115	128	171

TABLE 13:

Excision Procedures, Larynx - Three Editions of CRVS

1964

Excision

2051 Laryngectomy, without neck dissection .....
2054 with neck dissection .....
2055 Hemilaryngectomy .....
2056 Arytenoidectomy, external approach (See also 2084.) .....
2057 Epiglottidectomy, external approach .....
2058 endoral approach .....

1969

EXCISION[1/]

31300 Laryngofissure with removal of tumor or laryngocele (cordectomy) .....
31320 Thyrotomy, diagnostic .....
31325 for laryngeal web, two stage, with Keel insertion and removal (McNaught type) .....
31330 for laryngeal stenosis with graft or core mold, including tracheotomy .....
31360 Laryngectomy, without neck dissection .....
31365 with radical neck dissection ...
31370 Hemilaryngectomy, horizontal ...
31375 lateral-vertical .....
31380 anterio-vertical .....
31400 Arytenoidectomy or arytenoidopexy, external approach (see also 31560)
31420 Epiglottidectomy, external approach .....

1974

EXCISION

31300 Laryngotomy (thyrotomy, laryngofissure), with removal of tumor or laryngocele, cordectomy.....
31320 diagnostic .....
31360 Laryngectomy, total, without radical neck dissection.....
31365 with radical neck dissection..
31367 subtotal supraglottic, without radical neck dissection.....
31368 with radical neck dissection...
31370 Laryngectomy, partial (hemilaryngectomy), horizontal .....
31375 latero-vertical.....
31380 antero-vertical.....
31382 antero-latero-vertical .....
31390 Pharyngolaryngectomy with radical neck dissection, without reconstruction.....
31395 with reconstruction .....
31400 Arytenoidectomy or arytenoidopexy, external approach.....
(For endoscopic arytenoidectomy, see 31560)
31420 Epiglottidectomy .....

[1/] In the 1964 Edition, the equivalent of 31300-31330 were coded as numbers 2041-4 under "Incision".

- One continued from the 1964 Excision section with insertion of "radical" (31365 from 2054);
- Three derived from a single 1964 Code (31370, 31375, and 31380 from 2055);
- Three transferred from 1964 Incision section with identical descriptors (31300, 31320, and 31330 from 2041, 2042, and 2044);
- One transferred from 1964 Incision section with some change in descriptor (31325 from 2043); and
- The change in wording from 2043 to 31325 was the following:

2043 Thyrotomy, two stage, with Keel insertion for laryngeal web (McNaught type).....

31325 Thyrotomy, diagnostic for laryngeal web, two stage, with Keel insertion and removal (McNaught type).....

The change from 1969 to 1974 dropped codes 31325 and 31330; it added codes 31367, 31368, 31382, 31390, and 31395, and made revisions in descriptors for several of the numerical codes.

-Cardiovascular System

The growth in the number of procedures for the Cardiovascular System was the greatest of the anatomical systems -- approximately 5-fold from 1956-1957 to 1974. Table 14 spells out some of the detail. Not only was there a sharp increase in procedures from 1964 to 1969 and from 1969 to 1974, there was also a sharp shift in the nomenclature of the classification system, with a far more detailed breakdown of the categorization pattern.

Editions of CRVS prior to and including 1969 classified Surgery of the Heart and Pericardium in the subcategories Incision, Excision, Introduction (Pacemaker), Suture, Repair, and Destruction, with the number of procedures increasing gradually from 18 in 1956 and 1957 to 46 in 1969. In the 1974 Edition Surgery of the Heart and Pericardium embraced 114 procedures classified into 21 subcategories, for example Pericardium (7), Cardiac Tumor (2), Wounds of the Heart and Great Vessels (9), and Coronary Artery Procedures (10), as presented in Table 14.

TABLE 14:

Cardiovascular System, Number of Procedures, by Category - Six Editions of CRVS

Cardiovascular System	1956	1957	1960	1964	1969	1974
Heart and Pericardium						
Incision	7	7	10	5	8	
Excision	3	3	4	3	2	
Introduction (Pacemaker)	3	3	4	7	6	
Suture	3	3	2	1	1	
Repair	0	0	3	18	29	
Destruction	2	2				
	(18)	(18)	(23)	(34)	(46)	
Pericardium						7
Cartiac tumor						2
Pacemaker						8
Wounds of heart and great vessels						9
Cardiac valve						
Aortic valve						6
Metral valve						4
Tricuspid valve						5
Pulmonary valve						5
Multiple valve procedures						5
Coronary artery procedures						10
Post infection myocard procedures						3
Sepial defect						14
Sinus of valsalva						2
Total anomolous pulmonary venous drainage						1
Shunting procedures						7
Transposition of the great vessels						3
Truncus arteriosus						2
Aortic anomolies						11
Thoracic aortic aneurysm						4
Pulmonary artery						2
Miscellaneous and unlisted						4
						(114)
Arteries and Veins						
Incision						
Arteriotomy	3	3	3	3		
Phlebotomy	3	3	2	2		
Excision	5	5	9	8		
Introduction	10	12	9	18		
Repair	1	1	4	13		
Arterial anastomosis	4	4	6			
Venous anastomosis	3	3	2			
Suture	13	13	17	17		
	(42)	(44)	(52)	(61)		
Incision						
Arterial embolectomy - direct or with catheter					14	11
Venous thrombectomy					4	2
Excision						
Excision and graft (or direct repair)					23	18
Thrombectomy - with our without patch graft					12	18
By-pass graft					17	38
Exploration not followed by surgical repair (1969)					4	5
Exploration for post-operative hemorrhage or thrombosis					4	
Excision of graft						2
Introduction						
Injection procedures for vascular radiology					Cross ref.	
Intravenous					5	6
Intra-arterial - intra-aortic					11	13
Venous					18	16
Arterial					5	4
Intervascular cannulization (or shunt - 1974)					4	15
Repair (ligation and other procedures - 1974)					14	35
Suture					22	0
					(157)	(183)
Total - Cardiovascular system	60	62	75	95	203	297

Editions of CRVS prior to the 1969 edition classified procedures for surgery of the heart and veins in five categories, two of which showed subcategories, or 8 groups in all (two subcategories were dropped in 1964). In the 1969 edition the number of procedures more than doubled and the number of subcategories was extended. The expansion in number of procedures continued with the 1974 Edition.

Radiology and Nuclear Medicine

This medical service grouping underwent substantial change and growth over the 1957-1974 period. Radiology was expanded from simple radiological examination (picture taking) to include the complex procedures of Nuclear Medicine and Ultrasound, both diagnostic and therapeutic. Not only was there substantial expansion in number of listed procedures from 180 to 421 (Table 5), but there were additions and changes in the classifications. (See also Tables 4 and 6.)

A nucleus of procedures, subsumed under the heading X-Ray, Diagnostic from 1956 through 1964, and under Diagnostic Radiology in 1969 and 1974, increased from 86 procedures in 1956 to more than 150 in 1974 even though supplemented by a new category, Diagnostic Nuclear Medicine. This is not to say that every coded procedure of this nucleus group listed in 1956 carried through to 1974 with identical wording. The number of such items is relatively rare. However, for each of the nine anatomical categories represented in 1956, a group of Diagnostic X-Ray procedures is listed in each edition.

In addition to the nucleus groupings, about 40 procedures were listed under Radioactive Isotopes in 1960, 1964, and 1969. Also, a group of 35 procedures in Diagnostic Ultrasound appeared in 1974, together with nearly 100 classed as Diagnostic under Nuclear Medicine. Other changes in the basis of classification occurred apparently with some reclassification of procedures as well as an expansion in their number.

Generally, the number of identified procedures for each anatomical category was expanding. X-Ray of the abdomen was the single exception. Beginning with 3 procedures in 1956 and 1957, the number of procedures for this category dropped to 2 for 1960 and 1964, and went back to 3 in 1969 and 1974 (Table 15). However, the descriptions of the procedures changed in alternate editions; in 1956 and 1957 they were the same as they were in 1960 and 1964 and 1969 and 1974. In no case did the wording of a procedural descriptor as used in 1956-57 survive to the 1969-74 editions. However, it seems likely that the 1969-74 terminology 74000 Abdomen, single view (KUB) may not differ significantly from the 1956-57 terminology 7350 Plain film study.

TABLE 15:

Radiology of the Abdomen, Six Editions of CRVS

1956

Abdomen

7350 Plain film study .....
7351 Special studies, such as in passage of Miller-Abbott tube, etc. .....
7352 Fistula examination with contrast media.....

1957

Abdomen

7350 Plain film study .....
7351 Special studies, such as in passage of Miller-Abbott tube, etc. .....
7352 Fistula examination with contrast media.....

1960

Abdomen

7350 Abdomen, single A-P .....
7351 complete studies .....

1964

Abdomen

7350 Abdomen, single A-P .....
7351 complete study, minimum of three views ..

1969

Abdomen

74000 Abdomen, single view (KUB) .....
74010 with additional oblique or cone view .....
74020 complete, includes decubitus and/or erect views .....

1974

Abdomen

74000 Abdomen, single view (KUB).....
74010 with additional oblique or cone view .....
74020 complete, includes decubitus and/or erect view .....

Radiology of the Spine and Pelvis is a somewhat more representative section than Radiology of the Abdomen. The number of coded procedures rose from 13 in 1956 and 1957 to 20 in 1964, and to 22 in the 1974 edition (Table 16).

A general similarity in the descriptors persists over the period, but with some changes in wording, some fractionation, and some shifts in classification, notably for Discography and Myelography. The 1956 edition carried Code 7227 as Discogram; the 1957 edition carried the same Code 7227 as Discography. Both carried Code 7225 as Myelography.

The 1960 edition shifted Code 7227 to Myelography, lumar, spinal puncture and injection of contrast material by Radiologist and the 1964 edition used 7227 as the Code for Myelography, complete spinal canal and used 7228, to designate Myelography, complete spinal canal, including injection procedure.

The 1969 edition, with 5-digit codes, used two descriptors for Myelography and one for Discography, but transferred injection procedures to Surgery, Nervous System, Spine and Spinal Cord, Introduction section, Codes 63510, 63515, 63520, 63530, and 63535.

The 1974 edition listed three descriptors for Myelography and one for Discography. It transferred injection procedures to Surgery; Nervous System; Spine and Spinal Cord; Puncture for Injection, Drainage, or Aspiration section, with Codes 62284, 62290, and 62291.

Pathology - Laboratory

Rapid development of Pathology is reflected not only by expansion in number of procedures but by changes in classification.

In the 1956, 1957, and 1960 CRVS editions the tests of Blood, Urine, Spinal Fluids, and Toxicology, together with others generally similar, were classed under the general heading Pathology. In the 1964 edition, most of these tests, with the same code numbers, were classed under Laboratory Procedures and a new series, Bacteriology (Microbiology), was added.

The 1969 and 1974 editions returned to Pathology as the general heading, changed to the 5-digit code, and made a complete shift in the basis of classification. Instead of using Blood, Urine, and other test materials as subcategories, only six tests were listed under Urinalysis; all other tests were listed alphabetically under Chemistry and Toxicology, Hematology, Immunology, Microbiology, Anatomic Pathology, and Miscellaneous.

TABLE 16:

Radiology of the Spine and Pelvis, Six Editions of CRVS

1956

Spine and Pelvis

7201 Spine, complete
7204 cervical
7206 cervical, special oblique and flexion studies
7207 thoracic
7210 lumbosacral
7211 with obliques
7214 sacro-coccygeal
7215 lumbosacral, including pelvis
7217 Pelvis, including hips
7219 with lateral, both hips
7220 Sacro-iliacs
7225 Myelography
7227 Discogram

1960

Spine and Pelvis

7201 Spine, entire survey study, A-P and lateral
7204 cervical, A-P and lateral
7206 cervical, including oblique and special flexion studies
7207 thoracic, A-P and lateral
7210 lumbo-sacral, A-P and lateral
7211 complete lumbo-sacral study, including oblique studies
7212 lumbo-sacral, dynamic study
7214 sacro-coccygeal
7217 Pelvis, A-P
7220 Sacroiliac studies
7225 Myelography, lumbar
7226 complete
7227 spinal puncture and injection of contrast material by radiologist, add
7228 Discography
7229 spinal puncture and injection of contrast media by radiologist, add

1969

Spine and Pelvis

72010 Spine, entire, survey study (A-P & lateral)
72040 cervical, A-P and lateral
72050 complete
72052 including flexion and extension views
72070 thoracic
72080 thoraco-lumbar junction
72090 scoliosis study
72100 lumbar, limited
72110 lumbosacral, complete
72114 including bending views
72120 bending views only
72170 Pelvis, limited
72180 stereo
72190 complete
(For pelvimetry, see 74710)
72200 Sacro-iliac joints, limited
72202 complete
72220 Sacrum and coccyx
72250 Myelography, lumbar or any other single level
72270 all levels
(For injection procedures for myelography, see 63510-63520)
72290 Discography, lumbar or cervical
(For injection procedures for discography, see 63530, 63535)

1957

Spine and Pelvis

7201 Spine, complete
7204 cervical
7206 cervical, special oblique and flexion studies
7207 thoracic
7210 lumbosacral
7211 with obliques
7214 sacrococcygeal
7215 lumbosacral, including pelvis
7217 Pelvis, including hips
7219 with lateral, both hips
7220 Sacroiliacs
7225 Myelography
7227 Discography

1964

Spine and Pelvis

7201 Spine, entire, survey study (A-P and lateral)
7204 cervical, A-P and lateral
7205 cervical, minimum of four views
7206 cervical, complete, including flexion and extension studies
7207 thoracic, minimum of two views
7208 thoraco-lumbar, A-P and lateral
7210 lumbo-sacral, A-P and lateral
7211 complete lumbo-sacral, minimum five views
7212 lumbo-sacral, bending views
7217 Pelvis, A-P only
7218 stereo
7219 complete, minimum of three views (For Pelevimetry, see 7390.)
7220 sacro-iliac studies, A-P only (for complete, see 7219.)
7222 sacrum and coccyx
7225 Myelography, lumbar or any other single level
7226 including injection procedure
7227 Myelography, complete spinal canal
7228 including injection procedure
7229 Discography, lumbar or cervical
7230 including injection procedure

1974

Spine and Pelvis

72010 Spine, entire, survey study (AP and lateral)
72020 Spine, any level, single view
72040 cervical, AP and lateral
72050 complete
72052 including flexion and extension views
72070 thoracic
72080 thoraco-lumbar junction
72090 scoliosis study
72100 lumbar, limited
72110 lumbosacral, complete
72114 including bending views
72120 bending views only
72170 Pelvis, limited
72180 stereo
72190 complete
(For pelvimetry, see 74710)
72202 Sacro-iliac joints
72220 Sacrum and coccyx
72250 Myelography, lumbar or any other single level
72270 all levels
72275 gas
(For injection procedures for myelography, see 62284)
72290 Discography, lumbar or cervical
(For injection procedures for discography, see 62290, 62291)
72999 Unlisted procedures, spine or pelvis

The introduction of automated computerized laboratory procedures making panel and profile testing available and facilitating multiple analyses from the same specimen account in part for the increase in number of tests listed. Moreover, medical research has stimulated interest in the chemistry of physiological events apparently encouraging the use of additional tests as part of the diagnostic process. Whatever the reasons for the increase, the number of tests listed increased from the level of 180-190 in 1960 and 1964 to 604 in 1969, and 841 in 1974.

The pattern of expansion that has occurred in the anatomical systems and specialities in the CRVS is somewhat equivalent to that of the other terminology systems (Tables 4, 5, and 6).

Precision in comparing rates of expansion of the three terminology systems cannot be attained owing to the differences in dates of publication of the manuals. The percentage increase in number of procedures by Blue Shield from 1964 to 1970, by CRVS from 1964 to 1969, and by CPT from 1966 to 1970 were all between 60 and 70 percent. Subsequent changes for CRVS (1969 to 1974) and for CPT (1970 to 1977) approximated 50 percent, whereas the increase by Blue Shield from 1970 to 1978 was slightly less than 10 percent.

These comparisons, rough as they are, suggest that the Blue Shield System has followed a more restrained expansion program recently than either CPT or CRVS.

For Radiology and Pathology (Laboratory), however, the shifts in categories and number of procedures and tests has been particularly marked, in keeping with the technical developments in those areas.

Moreover, the overall pattern of change for Blue Shield and CPT is much the same, with the same type of variation that has been noted and illustrated for CRVS. Accordingly, it seems unprofitable to trace changes in the other two terminology systems in the same detail as has been done for CRVS.

Aside from the details of changes from edition to edition in the wording of procedure descriptors, there are several more general characteristics of the system that are significant. These are discussed in the next section.

COMPARISON OF THE THREE SYSTEMS OF PROCEDURAL TERMINOLOGY

General Characteristics

Several characteristics of the systems merit comparison. Certain characteristics are common to all systems:

1. The use of the same major medical practice categories, namely:

    a. Medicine
    b. Anesthesia
    c. Surgery
    d. Radiology and Nuclear Medicine
    e. Pathology and Laboratory.

2. The use of certain critical components:

    a. a description of each procedure
    b. a numeric code
    c. similar major subcategories of surgical procedures.

3. A general relationship to fee schedules or reimbursement schemes.

Within each of the above categories and their subcategories, the three systems differ from one another; moreover, substantial differences appear from edition to edition within a given system.

Number of Coded Procedures

The term "procedure" as used herein implies a verbal identification of the procedures and services performed by the physician, together with a unique numeric code.[1/]

Table 1, Summary of Procedures, 3 Systems giving an overall picture of the number of procedures listed by the three systems, has already been referenced; as have Tables 4, 5, and 6, giving comparable information for the several editions of manuals for the three systems of terminology.

1/ The only exceptions are very minor and occur in the first two editions of the CRVS. The 1956 edition includes descriptions of several allergy tests and disease states of allergy etiology for which relative values, but no numeric codes, are included. The 1957 edition gives numeric codes to all but one of these, thus retaining only one description and relative value without a unique numeric code.

Clearly the CPT-4 and the CRVS 1974 list substantially more procedures than the Blue Shield Manual. This situation holds for the total number of procedures, as well as for the totals for Medicine, Surgery, Pathology and Laboratory, and several of the anatomical divisions within Surgery, e.g., Integumentary, Musculoskeletal, Digestive, Urinary, and Nervous Systems, and for the Eye and Ocular Adnexa. For the male and female Genital Systems and Maternal Care, Blue Shield has the largest number of procedures. For Radiology and Nuclear Medicine, CRVS is on the low side, and for Pathology and Laboratory, CPT-4 is well above the others.

The reasons for this variation are not immediately clear, since all systems derive from the existing state of medical practice. However, the editions of the manuals from which the above counts were made were not all issued at the same date and may not be equally current (Table 2). Perhaps the genesis of the systems may also explain part of the differences. The forewords of the early editions of CPT and CRVS, as already noted, emphasized the need for a common nomenclature for medical procedures, whereas the Blue Shield Manual is a composite of schedules from all Blue Shield Plans. These had their origin in fee schedules and reimbursement, rather than in precise descriptions of each and every technical procedure used by physicians. The focus was on description as related to covered services and payment.

Indeed, it is doubtful that each and every procedure in CPT-4 and CRVS 1974 differs sufficiently from every other procedure in respect to the time, skill, and competence of the physician and the equipment and supplementary facilities involved, to justify a unique fee to reimburse the physician. Stated in another way, there is ample evidence that several substantial groups of procedures can be identified that are approximately equivalent within groups with respect to these factors.

Numerical Coding System

One difference in the systems is in the matter of coding. The Blue Shield utilizes a 4-digit numerical code for identifying procedures; the CPT beginning in 1970 and CRVS beginning in 1969 utilize a 5-digit code. The 5-digit code offers greater possibility for addition of new procedures than does the 4-digit code. Some sections of the Blue Shield 4-digit code are already filled although others have room to accommodate many more procedures; however, it is unclear whether and to what extent further expansion may be necessary. The growth in number of procedures from edition to edition has been very substantial in all 3 systems, particularly in the later editions. The

extent to which this expansion will continue and the areas in which it will occur are unpredictable and will depend on many factors in the future.

Not only do all 3 systems use the 5 major categories of medical services, namely: (1) Medicine, (2) Anesthesia, (3) Surgery, (4) Radiology, and (5) Pathology, they all utilize the same anatomical divisions and basic procedural categories and subcategories, such as Excision, Repair, Revision, Reconstruction, Grafts, Arthrotomy, Arthrocentesis, Arthroplasty, Synovectomy, and many other similar terms, with a specific 4- or 5-digit code for each procedure. The overall patterns of the coding of the three systems have much in common, as indicated in Table 17.

CRVS 1974 and CPT-4 use the same allocation of codes for all major categories of procedures. Thus, in both, the procedures related to the Integumentary System are listed in the 10,000-19,999 range, those in the Musculoskeletal System in the 20,000-29,999 range, and so on. Within these main divisions, the subordinate categories for the most part follow almost identical patterns, but differ slightly in number of procedures.

Blue Shield, with its 4-digit code, necessarily differs from the others. In some areas, the organizational hierarchy of Blue Shield follows the same general pattern as the others; but in some, it varies. These patterns will be discussed in more detail later, since the patterns vary from Specialty group to Specialty group.

Use of Modifiers

Modifiers and Special Service Codes were introduced in CPT-3 and CRVS 1969. They expanded and amplified certain items that had long been recognized as services for which a charge was legitimate. Mileage beyond a specified minimum distance, home or hospital visits at unusual hours, and assistance at surgery had been recognized for some time. These, together with a substantial list of qualifications pertaining to medical services and a group of administrative activities, were incorporated either into Special or Administrative Services or into Modifiers. The Special or Administrative Services were given their own code Series. Modifiers were identified by a two-digit suffix to the regular procedure code.

CRVS 1974 and CPT-4 continued and expanded the use of a system of modifiers initiated in the preceding issues of CRVS and CPT.

TABLE 17:

Coding Pattern - Three Medical Procedural Terminology Systems

Medical Category	Blue Shield	CRVS	CPT
Medicine	9000	90,000-97,799	90,000-97,799
Surgery			
Integumentary System	0001	10,000	10,000
Muskuloskeletal System	0500	20,000	20,000
Respiratory System	2000	30,000	30,000
Cardiovascular System	2300	33,000	33,000
Hemic and Lymphatic Systems	2750	38,000	38,000
Mediastinum and Diaphragm[1/]	2850	39,000	39,000
Digestive System	2900	40,100	40,490
Urinary System	3800	50,000	50,000
Male Genital System	4150	54,000	54,000
Female Genital System	4450	56,000	56,000
Maternal Care and Delivery	4800	59,000	59,000
Endocrine System	4900	60,000	60,000
Nervous System	5000	61,000	61,000
Eye and Ocular Adnexa	5400	65,000	65,000
Auditory System	5800	69,000	69,000
Radioimmunoassay	6500		
Special Services and Billing Procedures	None	99,000-095	99,000-090 99,170-199
Radiology	7000	70,000	70,000
Pathology and Laboratory	8000	80,000	80,000
Anesthesia	Surgical Codes	00001-199 + Surgical Codes	99,100-135 + Surgical Codes

[1/] Blue Shield - Mediastinum only.

As explained in CRVS 1974:

> "The use of modifiers permits the physician to indicate those circumstances in which his usual fee for the procedure is altered (increased OR decreased) and/or the service itself is changed from that described by its five-digit code.
>
> "Some modifiers indicate a reduction in fee (e.g., multiple surgical procedures, surgical procedure only); some indicate an increase in fee (e.g., unusual services, anesthesia risk). Other modifiers indicate that the service provided differs from that indicated by the five-digit code number (e.g., professional component of radiological services or surgery only without follow-up care) or that the service was adjunctive to that indicated by the five-digit code number (e.g., anesthesia services, assistant surgeon, outside laboratory).
>
> "The modifier code system will usually be used by the majority of physicians in only a small portion of billings, since relatively few of the modifiers will be applicable to their practices.
>
> "Properly used, the modifiers will obviate the necessity for more extensive reporting of the modifying circumstances.
>
> "Specific modifiers are listed at the beginning of each section in which those modifiers are likely to be applicable. A definitive listing is also contained in front of the Medicine section; however, any modifier may in appropriate circumstances be used in conjunction with procedural descriptions found in all parts of these Studies."2/

CPT-4 explains their use as follows:

> "5. MODIFIERS: Listed services and procedures may be modified under certain circumstances. When applicable, the modifying circumstances should be identified by the addition of the appropriate modifier code, which is a two-digit number placed after the usual procedure number from which it is separated by a hyphen. If more than one modifier is used, the "Multiple Modifers" code placed first after the procedure code indicates that one or more additional modifier codes will follow."3/

2/ CRVS 1974 op cit.

3/ CPT-4 op cit.

CRVS 1974 lists 36 Modifiers; CPT-4 lists 18. Not all Modifiers are applicable to procedures in all specialties, but some are used by more than one specialty. There is some evidence that the result is to expand the effective number of procedures substantially, by a factor of between 2 and 3.

The number of Modifiers applicable to the several specialties are shown in Table 18, and the complete list, with definitions, is presented in Tables 19 and 20. These relate to a wide variety of items which, however, fall into two distinct groups:

1. Those relating more or less directly to a particular service described by the code to which its 2-digit suffix is attached. These include, among others, unusual services, multiple procedures, reduced values, complications.

2. Those identifying the persons assisting the Surgeon, e.g., Anesthesiologist, Assistant Surgeon, Co-surgeon, or Surgical Team.

The former group of Modifiers serve to provide the physician with a convenient means of indicating the appropriateness of a higher or lower than usual charge in submitting his claim to the third-party payer. The latter group indicate that the claim involved is being made by someone other than the Primary Surgeon, and relates, not to the Primary Surgeon but to various of his assistants. Except for the Anesthesiologists, such assistants are usually reimbursed by a charge bearing a more or less fixed relation to the Primary Surgeon's charge. The Anesthesiologist may be reimbursed by a separate charge, based on the surgical procedure or on the basis of time segments, or on a combination of the two.

CRVS 1974 also lists 42 Special Services and Billing Procedures; CPT-4 lists 38 essentially equivalent Special Services and Reports, each with its individual 5-digit code. These relate to a variety of items, such as a visit for laboratory test including only collection or handling of a specimen; special specimen handling such as freezing, refrigeration, or air transportation; mileage charge; night calls; Sunday and holiday calls.

In addition to the Modifiers, both CPT-4 and CRVS 1974 list a series of code numbers applicable solely to Anesthesia. The CRVS numbers identify the time duration covered by the charge. The CPT-4 codes identify certain "qualifying circumstances for anesthesia", e.g., patient over 70 years of age or various complicating conditions.

TABLE 18:

Number of Modifiers Used by CPT-4 and CRVS 1974[1/]

	CPT-4	CRVS 1974
Medicine	10	12
Surgery	17	21
Anesthesia	7	12
Radiology	9	6
Pathology	4	7
Total (excluding duplication)	18	36

[1/] The Blue Shield Manual does not list any modifiers.

The Manual does, however, include a list of Type of Service codes. A few of these serve essentially the same purposes as do some of the Modifiers used by CPT and CRVS. They are provided for use by Providers in submitting claims for payment.

TABLE 19:

Modifiers Used by CRVS 1974

Listed values for most procedures *may* be modified under certain circumstances as listed below. When applicable, the modifying circumstance should be identified by the addition of the appropriate "modifier code number" (including the hyphen) after the usual procedure number. The *value* should be listed as a single modified total for the procedure.

For those modifier codes that provide a unit value, such values are indicated in terms of relativity to procedures with which they are most likely to be used (e.g., a modifier code with a unit value of 5.0(A) indicates that 5.0 anesthesia units may be added to the listed procedure when the modifier code is used). When applicable, any modifier code may be used in conjunction with any procedure code contained in these *Studies*.

When multiple modifiers are applicable to a single procedure, see modifier code -99.

Unit Value

-21 **Test or services performed** on hospital in-patients in the hospital laboratory should be identified by adding this modifier (-21) to the usual procedure number.

-22 **Unusual services:** When the services provided are greater than those usually required for the listed procedure, identify by adding this modifier (-22) to the usual procedure number. List modified value. Report may be required.

-23 **When a procedure which usually requires either no anesthesia** (e.g., proctoscopy) **or local anesthesia** (e.g., skin biopsy or excision of subcutaneous tumor), because of unusual circumstances (e.g., age, non-cooperation of patient) must be done under general anesthesia, identify by adding this modifier (-23) to the usual procedure number.

-24 **When a service is performed by a licensed physician assistant or personnel other than a physician** under direct supervision of a physician and the physician renders the charge for this service, a lesser charge may be warranted. Identify by adding this modifier (-24) to the usual procedure number.

-26 **Professional component:** Under certain circumstances, the physician may wish to submit a charge for the professional component of a procedure and not for the technical component. (See definition of professional component under Radiology ground rule 1). Under these circumstances the professional component charge is identified by adding this modifier (-26) to the usual procedure number and valued according to the "P.C. Unit Value" for that procedure.

-27 **Technical component:** Under certain circumstances, a charge may be made for the technical component alone (see definition of technical component under Radiology ground rule 1.) Under those circumstances the technical component charge is identified by adding this modifier (-27) to the usual procedure number.

-28 **Debridement and/or decontamination** are considered factors of additional value only when appreciable amounts of devitalized or contaminated tissue are removed. Identify by adding this modifier (-28) to the usual procedure number(s) and increase the value of the procedure by 10%.
(For more complex procedures, use modifier -22.)

-29 **Determination of refractive state** was *not* performed in course of diagnostic ophthalmological examination.

-30 **Anesthesia services:** Add this modifier (-30) to the usual procedure number and use basic value listed in the "Basic Anes." column for normal, uncomplicated anesthesia.

		Unit Value
-32	**Anesthesia procedures with a basic value of 3.0 units which become complicated** by prone or difficult lateral positions or surgical field avoidance or for medical necessity may warrant an additional charge. Indicate by adding this modifier (-32) to the usual procedure number and add to basic anesthesia value	1.0(A)
-33	**Anesthesia complicated by total body hypothermia above 50°C:** Indicate by adding this modifier (-33) to the usual procedure number and add to basic anesthesia value (For therapeutic hypothermia, see 96250, 96255)	5.0(A)
-35	**Anesthesia complicated by extra-corporeal circulation** (heart pump oxygenator [bypass] or pump assist), with or without hypothermia. Indicate by adding this modifier (-35) to the usual procedure number and add to basic anesthesia value	10.0(A)
-37	Anesthesia risk: When a *non-emergency* patient has an incapacitating systemic disease that is a constant threat to life, an additional charge *may* be warranted. Identify by adding this modifier (-37) to the usual procedure number, and add to basic anesthesia value up to	2.0(A)
-38	**Anesthesia for *emergency* surgery on patient with systemic disease** sufficiently severe to compromise the patient's status may warrant an additional charge. Identify by adding modifier (-38) to the usual procedure number and add to basic anesthesia value up to	3.0(A)
-39	**Anesthesia for *emergency* surgery on a patient who is moribund** or who has an incapacitating systemic disease that is a constant threat to life, may warrant an additional charge. Identify by adding modifier (-39) to the usual procedure number and add to basic anesthesia value up to	5.0(A)
-47	**Anesthesia by surgeon:** When regional anesthesia is provided by the surgeon, use the "basic" anesthesia value without the added value for time. (Note: Surgical units and Anesthesia units are not of the same dollar value.) List separately from the surgical service provided and identify by adding this modifier (-47) to the usual procedure number. (For local infiltration, digital block or topical anesthesia, see Surgery ground rules.)	
-48	**Reduced anesthesia value for supervision:** When the anesthesiologist is supervising the services of the nurse anesthetist and is involved in medical direction of the patient, including pre- and post-operative evaluation and care, but is not personally administering the anesthesia, his reimbursement shall be for the basic value of the procedure plus one unit per hour or fraction thereof, for the duration of the anesthesia. The anesthesiologist shall remain within visual and auditory range of the operating rooms under medical direction and shall extend medical direction to no more than two rooms. Medical direction excludes simultaneous administration of anesthesia by the anesthesiologist. Identify by adding this modifier (-48) to the usual procedure number.	
-49	**Multiple anesthesia modifiers:** Two or more modifiers may be necessary to identify the anesthesia service (e.g., anesthesia performed on a critically ill patient under hypothermia technique). Under these circumstances, additional charges under modifier -33 and -37 may be warranted. Identify by adding this modifier (-49) to the usual procedure number and briefly indicate the modifying circumstances	BR†
-50	**Bilateral procedure:** Unless otherwise identified in the listings, when bilateral procedures which add significant time or complexity to patient care are provided at the same operative session, identify and value the first or major procedure as listed. Identify the secondary or lesser procedure(s) by adding this modifier (-50) to the usual procedure number(s) and value at 50% of the listed value(s) unless otherwise indicated.	
-51	**Multiple procedures:** Unless otherwise identified in the listings, when multiple procedures add significant time and/or complexity, and when each procedure is clearly identified and defined, the following values shall prevail: 100% (full value) for the first or major procedure 50% for the second procedure 25% for the third procedure 10% for the fourth procedure 5% for the fifth procedure Over five procedures—by report **The second and each subsequent procedure should be identified by adding this modifier (-51) and valued at the appropriate percent of its listed value. A report outlining each procedure and the clinical indications may be required.**	

Unit Value

-52 **Reduced values:** Under certain circumstances, the listed value for a procedure is reduced or eliminated because of ground rules, common practice, or at the physician's election. (For illustrative examples, see ground rules preceding each individual section—Medicine, Anesthesia, Surgery, Radiology, Pathology.) Under such circumstances, the services provided can be identified by their usual procedure numbers and the use of a reduced value indicated by adding this modifier (-52) to the procedure number. (Use of this modifier provides a means of reporting services at a reduced charge without disturbing usual relative values.)

-53 **Primary emergency services:** When the surgical procedure is carried out by a physician who will not be providing the follow-up care, the value will be 70% of the listed value. This applies only to those procedures not designated by an asterisk. Follow-up services by other physician(s) shall be listed on a service (Sv.) basis. Identify by adding this modifier (-53) to the usual procedure number.

-54 **Surgical procedure only:** When one physician performs the surgical procedure itself and another provides the follow-up care, the value may be apportioned between them by agreement and in accordance with medical ethics. Identify the *surgeon's services* by adding this modifier (-54) to the usual procedure number.

-55 **Follow-up care only:** When one physician performs the surgical procedure itself and another provides the follow-up care, the value may be apportioned between them by agreement and in accordance with medical ethics. Identify the services of the physician providing follow-up care by adding this modifier (-55) to the usual procedure number.

-58 **Asterisk (*) procedure:** When the asterisk (*) procedure is carried out at the time of the initial office visit and this procedure constitutes the major service provided at that visit, identify by adding this modifier (-58) to the usual procedure number and, in lieu of the usual initial visit, add..... 0.15(S)

-62 **Two surgeons:** Under certain circumstances, the skills of two surgeons (usually with different skills) may be required in the management of a specific surgical problem (e.g., a urologist and a general surgeon in the creation of an ileal conduit, etc.) *By prior agreement, the total value may be apportioned in relation to the responsibility and work done, provided the patient is made aware of the fee distribution according to medical ethics.* The total value may be increased by 25% in lieu of the assistant's charge. Under these circumstances the services of each surgeon should be identified by adding this modifier (-62) to the joint procedure number(s) and valued as agreed upon.
(Usual charges for surgical assistance may also be warranted if still another physician is required as part of the surgical team.)

-64 **Co-surgeons:** Under certain circumstances, two surgeons (usually with similar skills) may function simultaneously as primary surgeons performing distinct parts of a total surgical service (e.g., two surgeons simultaneously applying skin grafts to different parts of the body or two surgeons repairing different fractures in the same patient). By prior agreement, the total value may be apportioned in relation to the responsibility and work done, provided the patient is made aware of the fee distribution according to medical ethics. The total value may be increased by an appropriate amount in lieu of the usual assistant's charge. Under these circumstances the services of each surgeon should be identified by adding this modifier (-64) to the joint procedure number(s) and valued as agreed upon.
(Usual charges for surgical assistance may also be warranted if still another physician is required as part of the surgical team.)

-66 **Surgical team:** Under some circumstances, highly complex procedures requiring the concomitant services of several physicians, often of different specialties, plus other highly skilled, specially trained personnel and various types of complex equipment are carried out under the "surgical team" concept with a single, global fee for the total service. The services included in the "global" charge vary widely from place to place and no single value can be listed for these "global" charges. These circumstances should be identified by adding this modifier (-66) to the basic procedure number. The value should be supported by a report to include itemization of the services, personnel and equipment included in the "global" charge.

-68 **Complications:** The surgical fee includes total post-operative care during listed follow-up period. Some complications or circumstances requiring unusual additional services during the listed follow-up period may warrant additional charges on a fee-for-service basis. Identify these conditions by adding this modifier (-68) to the usual procedure numbers for the additional values. May require a report.

TABLE 19 (Continued)

-75 **Services rendered by more than one physician:** When the patient's condition requires the additional services of more than one physician, each physician may identify his services by adding this modifier (-75) to the basic service he performed.

-76 **Repeat procedure by same physician:** The physician may indicate that a procedure was repeated subsequent to the original basic service. This may be reported by adding this modifier (-76) to the procedure code of the repeated service.

-77 **Repeat procedure by another physician:** The physician may indicate that a basic procedure performed by another physician had to be repeated. This may be reported by adding this modifier (-77) to the repeated service.

-80 **Assistant surgeon:** Surgical assistant services are identified by adding this modifier (-80) to the usual procedure number(s) and are valued at 20% of the listed value of the surgical procedure(s).

OR

-81 **Minimum assistant surgeon allowance:** Identify by adding this modifier (-81) to the usual procedure number and value at..... 1.1(S)

-90 **Reference (outside) laboratory:** When laboratory procedures are performed by other than the billing physician the procedure(s) shall be identified by adding this modifier (-90) to the usual single or panel procedure number.

-99 **Multiple modifiers:** Under certain circumstances multiple modifiers may be applicable. (For illustrative examples, see ground rules preceding each individual section—Medicine, Anesthesia, Surgery, Radiology, Pathology.) Under these circumstances identify by adding this modifier (-99) to the usual procedure number and briefly indicate the circumstances..... BR†

BR† By report; see ground rule 4(a) for detailed information.

TABLE 20:

Modifiers Used by CPT-4

MODIFIERS

-22 Unusual Services: When the service(s) provided is greater than that usually required for the listed procedure, it may be identified by adding modifier '-22' to the usual procedure number. A report may also be appropriate.

-23 Unusual Anesthesia: Periodically, a procedure, which usually requires either no anesthesia or local anesthesia, because of unusual circumstances must be done under general anesthesia. This circumstance may be reported by adding the modifier '-23' to the procedure code of the basic service.

-26 Professional Component: Certain procedures (eg, laboratory, radiology, electrocardiogram, specific diagnostic services) are a combination of a physician component and a technical component. When the physician component is reported separately, the service may be identified by adding the modifier '-26' to the usual procedure number.

-30 Anesthesia Service: The anesthesia service may be identified by adding the modifier '-30' to the usual procedural code number of the basic service.

-47 Anesthesia by Surgeon: When regional or general anesthesia is provided by the surgeon, it may be reported by adding the modifier '-47' to the basic service. (This does not include local anesthesia.)

-50 Multiple or Bilateral Procedures: When multiple or bilateral procedures are provided at the same operative session, the first major procedure may be reported as listed. The secondary or lesser procedure(s) may be identified by adding the modifier '-50' to the usual procedure number(s).

-52 Reduced Services: Under certain circumstances a service or procedure is partially reduced or eliminated at the physician's election. Under these circumstances the service provided can be identified by its usual procedure number and the addition of the modifier '-52', signifying that the service is reduced. This provides a means of reporting reduced services without disturbing the identification of the basic service.

-54 Surgical Care Only: When one physician performs a surgical procedure and another provides preoperative and/or postoperative management, surgical services may be identified by adding the modifier '-54' to the usual procedure number.

-55 Postoperative Management Only: When one physician performs the postoperative management and another physician has performed the surgical procedure, the postoperative component may be identified by adding the modifier '-55' to the usual procedure number.

-56 Preoperative Management Only: When one physician performs the preoperative care and evaluation and another physician performs the

TABLE 20 (Continued)

surgical procedure, the preoperative component may be identified by adding the modifier '-56' to the usual procedure number.

-66 Surgical Team: Under some circumstances, highly complex procedures (requiring the concomitant services of several physicians, often of different specialties, plus other highly skilled, specially trained personnel and various types of complex equipment) are carried out under the 'surgical team' concept. Such circumstances may be identified by each participating physician with the addition of the modifier '-66' to the basic procedure number used for reporting services.

-75 Concurrent Care. Services Rendered by More than One Physician: When the patient's condition requires the additional services of more than one physician, each physician may identify his or her services by adding the modifier '-75' to the basic service performed.

-76 Repeat Procedure by Same Physician: The physician may need to indicate that a procedure or service was repeated subsequent to the original service. This may be reported by adding the modifier '-76' to the procedure code of the repeated service.

-77 Repeat Procedure by Another Physician: The physician may need to indicate that a basic procedure performed by another physician had to be repeated. This may be reported by adding modifier '-77' to the repeated service.

-80 Assistant Surgeon: Surgical assistant services may be identified by adding the modifier '-80' to the usual procedure number(s).

-81 Minimum Assistant Surgeon: Minimum surgical assistant services are identified by adding the modifier '-81' to the usual procedure number.

-90 Reference (Outside) Laboratory: When laboratory procedures are performed by a party other than the treating or reporting physician, the procedure may be identified by adding the modifier '-90' to the usual procedure number.

-99 Multiple Modifiers: Under certain circumstances two or more modifiers may be necessary to completely delineate a service. In such situations modifier '-99' should be added to the basic procedure, and other applicable modifiers may be listed as a part of the description of the service.

It is a matter of considerable interest that billing procedures for Anesthesia constitute a substantial departure in theory from that used throughout all other sections of the terminology systems. In Medicine, Surgery, Radiology, and Pathology, the trend has been toward more and more precise description of what the Physician, Surgeon, Radiologist, or Pathologist actually does. In the case of the Anesthesiologist, however, this approach is almost totally abandoned. The prescribed pattern takes no account of whether the Anesthesiologist's services related to inhalation, intrevenous, spinal, rectal, or local anesthesia, let alone any of the subcategories of these general classes.

The Blue Shield Manual does not identify Modifiers. It does, however, list a number of Type of Service Codes, several of which serve much the same purpose as the second purpose described above for Modifiers, namely, to identify certain persons assisting in or cooperating in the conduct of surgery. These are:

Code	Type of Service
0 (numerical)	Surgical Assistance
4	Anesthesia
B	Concurrent Care

Use of Relative Values

In the 1974 edition of the CRVS (as in all earlier editions), relative values were assigned to most procedures. Concerning these relative values, the 1974 edition states:

> "The Relative Value Studies is a reflection of the practice of medicine in California. It is a coded listing of physician services with unit values to indicate the relativity within each individual section of median charges by physicians for these services. The accompanying instructions, ground rules, and modifiers explain the application of these procedure descriptors and unit values in medical practice. It is important to remember that all sections of the book may be used by any or all physicians. Appropriate surgery descriptors are not confined to use by surgeons, nor is the medicine section confined to use by internists, etc.
>
> "Since the unit values and accompanying ground rules reflect medians of charges by California physicians, they do not necessarily reflect the charges of any

individual physician nor the pattern of charges in any specific area of California.

"The primary purpose of the RVS is to precisely describe and code the services provided by physicians in California. The general acceptance of the RVS by insurance carriers and government agencies assures the physician who uses its coding and terminology that the services and procedures he performs are identifiable. With appropriate consideration to individual and local variations in practice, the RVS may also be used:

1. as a guide to a physician in determining his charges;

2. as a guide for insurance carriers and government agencies in determining their commitment; and

3. as a guide in evaluating individual claims."[4/]

"Employment of Unit Values

Individual physicians are encouraged to establish their fees for individual services in accordance with their own estimates of the value of the service, the time spent, materials used, and the economics of their own particular practices. The Relative Value Studies is not a schedule of fees, nor should it be construed as such. It may, however, be used as a 'guide' to physicians to assist them in establishing fees, since the relativities expressed as unit values reflect variations in average statewide charges for those procedures that are listed along with a relative value.

"Nevertheless, some physicians have chosen to employ the RVS as the basis for some or all of the fees for services they perform. When the RVS is used in connection with a 'conversion factor' to establish fees, it must be emphasized that the SAME CONVERSION FACTOR CANNOT BE APPLIED TO MORE THAN ONE INDIVIDUAL SECTION, nor to both the Total and PC Values within one section, i.e., Radiology. It is imperative that physicians who determine their fees by application of a conversion factor to the unit

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[4/] CRVS 1974, op cit. p. 8.

values in the RVS determine an appropriate conversion factor for EACH SECTION SEPARATELY. Within this revision, furthermore, a relativity for the 'professional component' (PC) may be listed as well as a relativity for a total service. Separate conversion factors are also necessary for use with these 'professional component' values.

"In this revision, the value of a unit (and therefore the usual conversion factor) in each section, except Anesthesiology, has been altered significantly from that of the 1969 edition (unrevised). Hence, physicians who wish to employ relative values in this manner cannot merely apply the conversion factors which they have been using in connection with the earlier edition."5/

Under a March 1978 consent order, the Federal Trade Commission barred the California Medical Association (CMA) from publishing or developing relative value studies. CMA was also required to withdraw studies already published and to stop suggesting conversion factors to its members.

Neither the current Blue Shield Coding and Classification Manual nor the CPT-4 incorporates a set of relative values, although the 1961 and 1964 Blue Shield editions were titled "Professional Services Index", and carried numerical indices.

Provisions Regarding Pre- and Post-Operative Care

An important consideration involved in a surgical procedure is the matter of pre- and post-operative consultations and care.

The general statements for the three terminology systems appear similar in intent; nevertheless, differences in the details of the statements seem to permit considerably more latitude for interpretation in some than others.

The current Blue Shield Manual, under Guidelines - Surgery, states (p. VIII):

"SURGERY

The surgical section includes operative procedures, the treatment of fractures and dislocations, dressing

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5/ CRVS 1974, op cit. p. 8

of burns, endoscopic procedures, and other procedures generally classified as surgery.

"Operative procedures and fracture care automatically includes anesthesia administered by the surgeon, pre- and post-operative care, and usual aftercare."6/

No guidelines or notations in the Manual give suggestions as to what pre- and post-operative and usual aftercare may be. This would appear to be purely a matter for the physician, or perhaps, the individual Blue Shield Plan to decide.

The CPT-4 contains a more elaborate discussion:

"2. LISTED SURGICAL PROCEDURES include the operation per se, local infiltration, digital block or topical anesthesia when used, and the normal, uncomplicated follow-up care. This concept is referred to as a 'package' for surgical procedures.

"11. ASTERISK(*) PROCEDURES OR ITEMS: Certain relatively small surgical services involve a readily identifiable surgical procedure but include variable preoperative and postoperative services (e.g., incision and drainage of an abscess, injection of a tendon sheath, manipulation of a joint under anesthesia, dilation of the urethra, etc.). Because of the indefinite pre- and post-operative services the usual 'package' concept for surgical services (see above) cannot be applied. Such procedures are identified by an asterisk (*) following the procedure code number.

"When an asterisk (*) follows a surgical procedure code number, the following rules apply:

a. The service as listed includes the surgical procedure only. Associated pre- and post-operative services are not included in the service as listed.

b. Preoperative services are considered as one of the following:

1. When the asterisk (*) procedure is carried out at the time of an initial visit (new patient) and this procedure constitutes

6/National Association of Blue Shield Plans, 1971 Blue Shield Coding and Nomenclature Manual (updated to January 1978).

the major service at that visit, procedure number 99025 is listed in lieu of the usual visit as an additional service.

2. When the asterisk (*) procedure is carried out at the time of an initial or other visit involving significant identifiable services (e.g., removal of a small skin lesion at the time of a comprehensive history and physical examination), the appropriate visit is listed in addition to the asterisk (*) procedure and its follow-up care.

3. When the asterisk (*) procedure is carried out at the time of a follow-up (established patient) visit and this procedure constitutes the major service at that visit, no visit service is usually added.

4. When the asterisk (*) procedure requires hospitalization, an appropriate hospital visit is listed in addition to the asterisk (*) procedure and its follow-up care.

c. All postoperative care is added on a service-by-service basis (e.g., office or hospital visit, cast change, etc.).

d. Complications are added on a service-by-service basis (as with all surgical procedures)." 7/

The Manual contains no specific guidelines or notations as to what the expected pre- and post-operative care may be.

The CRVS 1974 carries guidelines as follows:

"1. GENERAL

Listed values for all surgical procedures include the surgery, local infiltration, digital block or topical anesthesia when used and the normal uncomplicated follow-up care for the period indicated in days in the column headed 'Follow-up Days'. (For pre-operative visits, see below).

7/ CPT-4 op cit.

"Follow-up care for diagnostic procedures (e.g., endoscopy, injection procedures for radiography, etc.) included only that care related to recovery from the diagnostic procedure itself. Care of the condition for which the diagnostic procedure was performed or other concomitant conditions is not included and may be charged for in accordance with the services rendered.

"Follow-up care for therapeutic surgical procedures generally includes all normal post-operative care. Complications, exacerbations, recurrence or the presence of other diseases or injuries requiring additional services concurrent with the procedure(s) or during the listed period of normal follow-up care may warrant additional charges. (See unit value modifier -68).

"When an additional surgical procedure(s) is carried out within the listed period of follow-up care for a previous surgery, the follow-up periods will continue concurrently to their normal terminations.

Immediate Pre-operative Visits and Other Services by the Surgeon

"Under most circumstances, including ordinary referrals, the immediate pre-operative visit in the hospital or elsewhere necessary to examine the patient, complete the hospital records, and initiate the treatment program is included in the listed value for the surgical procedure.

"Additional charges may be warranted for pre-operative services under the following circumstances:

a) when the pre-operative visit is the initial visit (e.g., an emergency) and prolonged detention or evaluation is required to prepare the patient or to establish the need for and type of surgical procedure.

b) when the pre-operative visit is a consultation, as defined on page 25.

c) when procedures not usually part of the basic surgical procedure (e.g., bronchoscopy prior to chest surgery) are provided during the immediate pre-operative period.

d) when a procedure could normally be an office procedure, but under certain circumstances requires hospitalization (e.g., age, condition of patient). See modifier code -22.

(For pre-operative visits for surgical procedures by an asterisk (*), see rule 8.)

"8. ASTERISK (*) ITEMS

Where an asterisk (*) precedes a procedure number and its value, the following rules apply:

a) the listed value is for the SURGICAL PROCEDURE ONLY

b) ALL POST-OPERATIVE CARE is to be ADDED on a fee-for-service basis.

c) when the asterisk (*) procedure is carried out at the time of the initial office visit and this procedure constitutes the major service provided at that visit, identify by using modifier -58 and adding 0.15 surgical units in lieu of the usual initial visit (e.g., 90000 or 90010).

d) when the asterisk (*) procedure is carried out as part of an office, home, hospital, or other visit involving significant, identifiable, additional services, list the appropriate visit and listed value for that visit in addition to listing the asterisk procedure and its value."[8/]

The CRVS 1974 Manual carries after most surgical procedure descriptions an indicated number of Follow-up Days, as referenced in the first paragraph of General quoted above. In this respect, the CRVS differs from the Blue Shield and CPT manuals and provides more definite guidance.

Some of the similarities and differences among the terminology systems are unique to the major medical specialties. In all three systems, the procedural terminology varies somewhat among the specialties.

[8/] CRVS 1974, op cit.

Comparison by Medical Specialty Groups

Medicine

The terminology centers on Visits -- Office, Home, Hospital, Convalescent, Custodial, Emergency Room, Consultations, and Psychiatric -- together with monitoring services. It extends to include a battery of specific diagnostic services which cover the Eye, Ear, Cardiovascular, Cardiovascular Cathetarization, Pulmonary, Allergies, Therapeutic Procedures, and Physical Medicine.

The arrangement and combination of detail varies from system to system. All three systems carry (1) Office Visits, (2) Home Visits, and (3) Nursing Home, Boarding Home, Domiciliary or Custodial Care Facilities as first level subcategories of Medicine with the distinction made between New and Established Patients. Other first level subcategories include; Hospital Visits, Emergency Room, Psychiatric, and Monitoring Services, but practice varies in distinguishing between New and Established Patients and the number of separate procedures. All include a battery of diagnostic services as part of Medicine, but the details of classification vary from system to system.

An important characteristic of a Visit is the level of skill and training required of the physician, as well as the time and amount of detail required in examining the patient.

Substantial agreement is evident in use of several generalized descriptors, such as Minimal, Brief, Limited, Intermediate, and Comprehensive, representing an increasing scale of demand on the physician.

These are evident in the Office Visit portion of the three system manuals presented in Tables 21, 22, and 23. The corresponding descriptors of level of service are included as Tables 24, 25, and 26.

Several features of these examples merit attention;

1. The similarity of numerical code between CPT-4 and CRVS 1974 in contrast to Blue Shield.

2. The distinction between New and Established Patient. This holds in all three systems for Home Visits, but varies among them for other places of service.

TABLE 21:

Office Visits - Codes and Descriptors, Blue Shield 1978

New Patient

9000	Brief service (independent procedure)
9001	Brief service with injection
9002	
9003	Limited history, examination, and treatment
9004	Intermediate history, examination and treatment
9005	Comprehensive history and examination, including initiation of diagnostic and treatment program
9006	
9007	
9008	
9009	
9010	
9011	Periodic or annual type examination, adult
9012	
9013	
9014	
9015	
9016	
9017	
9018	
9019	Not otherwise classified

Established Patient

9020	Brief service, (independent procedure)
9021	Brief service with injection
9022	
9023	
9024	
9025	Limited examination, evaluation and treatment (usual follow-up visit)
9026	Intermediate examination, evaluation and treatment
9027	Comprehensive examination, evaluation and treatment
9028	
9029	
9030	
9031	
9032	
9033	
9034	
9035	
9036	
9037	
9038	
9039	
9040	Periodic or annual type examination, adult
9041	
9042	
9043	
9044	
9045	Well-baby care,. routine, per visit, (e.g., with a maximum of twelve visits during the first year, and a maximum of four visits during the second year. This item does not include immunizations.)
9046	
*9047	Emergency accident follow-up care
9048	
9049	Not otherwise classified

*Revised 1/78

TABLE 22:

Office Visit Codes and Descriptors - CRVS 1974

Office Visits

Those services performed by a physician in his own office, or in an out-patient facility of a hospital, such as an out-patient clinic, examining or treatment room, etc. See 90500-90570 for emergency care; see 90088, 90751-90776 for preventive services.

NEW PATIENT

		Unit Value
	(For visits that include provision of an asterisked surgical procedure, see Surgery ground rule 8.)	
90000	*Brief* evaluation, history, examination and/or treatment	5.9
90010	Initial *limited* history and examination, including initiation of diagnostic and treatment program	7.6
90015	Initial *intermediate* history and examination, including initiation of diagnostic and treatment program	10.5
90020	Initial *comprehensive* history and examination, including initiation of diagnostic and treatment program	17.5
90026	An *unusually complex* medical problem, necessitating a comprehensive history and complete examination, extensive review of prior medical records, compilation and assessment of data, any age	BR †
	(For established patient, see 90086, 90087)	

ESTABLISHED PATIENT

		Unit Value
90030	*Minimal service*, e.g., injection, minimal dressing, blood pressure or weight check (independent procedure)	2.4
	(For immunizations, see 90720-90729)	
90040	*Brief* examination, evaluation and/or treatment, same or new illness	3.5
90050	*Limited* examination, evaluation and/or treatment, same or new illness	5.2
90060	*Intermediate* examination, evaluation and/or treatment, same or new illness	6.5
90070	*Extended* re-examination and/or re-evaluation	8.7
90080	*Comprehensive* re-examination and/or re-evaluation	13.0
	(For well child care, see 90751-90776)	
90085	*Comprehensive* re-examination or re-evaluation when complicated by chronically disabling condition	16.0

DIAGNOSTIC PROBLEM OR CHALLENGE

A problem new to an established patient, requiring extended service and time, diagnostic acumen and skills (e.g., myopathy, metabolic disease, cardiovascular problem, tumor or collagen disease). (For new patient, see 90026)

		Unit Value
90086	*Comprehensive:* requiring a complete history, examination and/or evaluation of the patient as a whole, necessitating an unusual amount of time, skill and judgment (e.g., metabolic disease, cardiovascular problem, convulsive disorder)	RNE°
90087	*Complex*: requiring a thorough evaluation of all systems, review of an extensive history and/or involving a problem requiring great skill, diagnostic acumen and a prolonged period of evaluation and time (obscure infection, genetic problem, psychosocial problem associated with organic disease, tumor).	BR †

PERIODIC EXAMINATION

90088	Periodic or annual type examination, adult..	11.0
	(For infant, child or adolescent services, see 90751-90764)	
	(For multiphasic testing, see 99090)	

TABLE 23:

Office Visit Codes and Descriptors - CPT-4

OFFICE MEDICAL SERVICES

(see Introduction for definitions and examples of levels of service)

NEW PATIENT

90000	Brief service
90010	Limited service
90015	Intermediate service
90020	Comprehensive service

ESTABLISHED PATIENT

90030	Minimal service
90040	Brief service
90050	Limited service
90060	Intermediate service
90070	Extended service
90080	Comprehensive service

TABLE 24:

Office Visits - Definitions of Level of Service - Blue Shield

BRIEF SERVICE

A service concerning a relatively simple problem requiring a brief or minimal period of time, skill, or judgement by the physician.

LIMITED HISTORY, EXAMINATION, EVALUATION OR TREATMENT

This is a service consisting of either a single system history and examination or an interval history and examination, with discussion of findings and/or treatment.

INTERMEDIATE HISTORY, EXAMINATION AND TREATMENT

This is a service providing a complete medical history and physical examination of one or more organ systems, but not requiring a comprehensive evaluation of the patient as a whole.

EXTENDED EXAMINATION, EVALUATION AND TREATMENT

This is a service requiring an unusual amount of time, skill or judgment, but not necessitating a complete examination or re-examination of the patient as a whole.

COMPREHENSIVE HISTORY, EXAMINATION, DIAGNOSIS AND TREATMENT

This includes a complete evaluation or re-evaluation of the patient covering all major systems, including history, physical examination, and discussion of the findings and/or treatment.

INTENSIVE CARE

This is a level of care needed to treat a critically ill patient usually by repeated and/or prolonged visits by the physician. Location of a patient in the intensive nursing care section of the hospital does *not* automatically warrant use of the intensive medical care codes. Care requiring constant attendance for a lengthy period of time should be identified with code 9077.

TABLE 25:

Office Visits - Definitions of Level of Service, CRVS 1974

DEFINITIONS

For the purpose of this section, the following definitions apply

LEVELS OF SERVICE. Examinations, evaluations, treatment, counseling, conferences with or concerning patients, preventive pediatric and adult health supervision, and similar services necessitate the wide variations in skill, effort and time required for prevention, diagnosis and treatment of illness and the promotion of optimal health. Seven levels are recognized:

Minimal:	A level of service including injections, minimal care, etc., not necessarily requiring the presence of the physician.
Brief:	A level of service requiring a brief period of time, with minimal effort of the physician.
Limited:	A level of service requiring limited effort or judgment, such as abbreviated or interval history, limited examination or discussion of findings and/or treatment.
Intermediate:	A level of service such as a complete history and examination of one or more organ systems, or an in-depth counseling or discussion of the findings, but not requiring a comprehensive examination of the patient as a whole.
Extended:	A level of service requiring an unusual amount of time, effort or judgment but not a complete examination of the patient as a whole.
Comprehensive:	A level of service providing an in-depth evaluation of the patient.
Unusually Complex:	An unusually complex medical problem necessitating a comprehensive history and complete examination, extensive review of prior medical records, compilation and assessment of data.

TYPE OF PATIENT

New Patient:	One new to the physician, office, or facility. The initial comprehensive history and examination need not be done at the time of the first visit.
Established Patient:	One known to the physician and/or whose records are normally available.

TABLE 26:

Office Visits - Definitions of Level of Service - CPT-4

LEVELS OF SERVICE: Examinations, evaluations, treatment, conferences with or concerning patients, preventive pediatric and adult health supervision, and similar medical services necessitate the wide variations in skill, effort, time, responsibility and medical knowledge required for the prevention or diagnosis and treatment of illness and the promotion of optimal health. Each level of service may be used by all physicians. Six levels are recognized:

MINIMAL LEVEL OF SERVICE: A level of service supervised by a physician but not necessarily requiring his presence.
For example:

a. Routine immunization for tetanus.

b. Blood pressure determination for adequacy of control.

c. Removal of sutures from laceration.

BRIEF LEVEL OF SERVICE: A level of service pertaining to the evaluation and treatment of a condition requiring only an abbreviated history and examination.
For example:

a. Examination of a patient with subconjunctival hemorrhage.

b. Examination for acute tonsillitis.

c. Examination of minor trauma.

d. Review of recent x-ray report and abbreviated discussion with patient under study.

e. Concurrent hospital care for a minor secondary diagnosis.

f. Abbreviated evaluation of a hospitalized patient in stage of recovery from an uncomplicated renal colic.

LIMITED LEVEL OF SERVICE: A level of service pertaining to the evaluation of a circumscribed acute illness or to the periodic re-evaluation of a problem including an interval history and examination, the review of effectiveness of past medical management, the ordering and evaluation of appropriate diagnostic tests, the adjustment of therapeutic management as indicated, and the discussion of findings and/or medical management.
For example:

a. Treatment of an acute respiratory infection.

b. Review of interval history, physical status and control of a diabetic patient.

c. Review of hospital course, studies, orders and chest examination of patient with rheumatic heart disease recovering from acute congestive failure; revision of orders and limited exchange with nursing staff.

d. Review of interval history, physical status and adjustment of medication in patient with compensated arteriosclerotic heart disease on chronic diuretic therapy.

e. Review of mental status findings, limited team conference (exchange with nursing and ancillary personnel), and revision of medical management orders on a patient with a toxic psychosis.

f. Review of recent history, determination of blood pressure, auscultation of heart and lungs and adjustment of medication in essential hypertension.

TABLE 26 (Continued)

INTERMEDIATE LEVEL OF SERVICE: A level of service pertaining to the evaluation of a new or existing condition complicated with a new diagnostic or management problem not necessarily relating to the primary diagnosis that necessitates the obtaining and evaluation of pertinent history and physical or mental status findings, diagnostic tests and procedures, and the ordering of appropriate therapeutic management; or a formal patient, family, or hospital staff conference regarding patient medical management and progress.
For example:

a. The evaluation of a patient with arteriosclerotic heart disease with recent onset of unstable angina previously on an adequate therapeutic program; this service involves a detailed interval history and physical examination and ordering of appropriate diagnostic tests and discussion of new therapeutic management.

b. Review of hospital studies and course in conjunction with a team conference (formal meeting with nursing and ancillary personnel) regarding medical management of a patient with acute schizophrenic symptoms.

c. Review of interval history, re-examination of musculoskeletal systems and abdomen, discussion of findings, and adjustment of therapeutic program in a patient with arthritic disorders with recently developed gastric complaints.

d. Reviewing school reports, developmental examinations, and/or psychometric tests in conference with parents of a child with a recurrent school problem.

e. Review of recent illness, re-examination of pharynx, neck, axilla, groin, and abdomen, interpretation of laboratory tests, and prescription of treatment in a patient with chronic lymphocytic leukemia not responding to a previous management plan.

f. Conference with patient and/or family to review studies, hospital course, and findings in a teenager with acute hepatitis secondary to drug abuse.

EXTENDED LEVEL OF SERVICE: A level of service requiring an unusual amount of effort or judgment including a detailed history, review of medical records, examination, and a formal conference with patient, family or staff; or a comparable medical diagnostic and/or therapeutic service.
For example:

a. Re-examination of neurological findings, detailed review of hospital studies and course, and formal conference with patient and family jointly concerning findings and plans in a diagnostic problem of suspected intracranial disease in a young adult.

b. Detailed intensive review of studies and hospital course and thorough re-examination of pertinent physical findings of a patient with a recent coronary infarct with complications requiring constant physician bedside attention.

c. Review of results of diagnostic evaluation, performance of a detailed examination and a thorough discussion of physical findings, laboratory studies, x-ray examinations, diagnostic conclusions and recommendations for treatment of complicated chronic pulmonary disease.

d. Detailed review of studies and hospital course and thorough re-examination of pertinent physical findings of a patient with a recent coronary infarct and formal conference with patient or family to review findings and prognosis.

e. Re-evaluation of a psychotic delusional patient who develops severe and acute abdominal pain involving a mental status re-assessment but not a psychiatric diagnostic interview, and a conference with the consulting surgeon and nursing personnel.

TABLE 26 (Continued)

f. Detailed intensive review of studies and hospital course and thorough re-examination of pertinent findings of a patient with a recently diagnosed uterine adenocarcinoma who also has a pulmonary coin lesion under consideration for thoracotomy; this service involves several abbreviated conferences with consultants, and family or patient.

COMPREHENSIVE LEVEL OF SERVICE: A level of service providing an in depth evaluation of a patient with a new or existing problem requiring the development or complete re-evaluation of medical data. This procedure includes the recording of a chief complaint(s), and present illness, family history, past medical history, personal history, system review, a complete physical examination, and the ordering of appropriate diagnostic tests and procedures.

3. The methods of using Brief, Limited, Intermediate, etc. as measures of the service. The definitions of each level are substantially equivalent in all systems, but are essentially subjective and sufficiently different in wording to merit presentation in the tables. Further, their usage in the individual descriptors of procedures varies among the systems.

Surgery

With its approximately 3,000 coded procedures, it is impracticable to do more than give examples of how the three systems handle this complex subject. Selections from one part of the Respiratory System -- namely, Surgery of the Nose -- will serve as an example. The number of procedures in the section for each System are summarized in Table 27, and the specific procedure codes with descriptions in Tables 28, 29, and 30.

The close general agreement of CPT-4 and CRVS 1974 is clear. However, numbers 30440 and 30460 appear only in CRVS, and number 30630 appears only in CPT-4.

Generally equivalent, but not identical, wording is carried in the Blue Shield Index. The activities described under Endoscopy in Blue Shield codes 2030, 2031, and 2032, appear substantially equivalent to those carried under Removal of Foreign Body in the others, codes 30300, 30310, and 30320. Also, Blue Shield characteristically includes a Not Otherwise Classified as the last code in each section throughout.

The relationships among the three systems exhibited in the extract from Nose can be duplicated over and over throughout Surgery.

The most characteristic hierarchy in Surgery is:

Major category (integumentary cardiovascular, digestive, etc. systems)

Minor category (skin, mucous membrane -- tissues, bones)

Surgical category (incision, excision, repair, etc.)

Descriptors of individual procedures

TABLE 27:

Surgery of the Nose. Number of Procedures - Three Terminology Systems

	Number of Coded Procedures		
	CRVS	CPT-4	Blue Shield
Incision	2	2	3
Excision	12	12	7
Introduction	2	2	3
Removal of Foreign Body	3	3	
Repair	15	14	15
Destruction	2	3	4
Other Procedures	6	6	
Endoscopy			4
Manipulation	—	—	5
TOTAL	42	42	41

TABLE 28:

Procedures for Respiratory System, Surgery of the Nose, Blue Shield

Incision

(For simple furuncle, see 0006)

2000 Drainage of intranasal abscess or hematoma of lateral cartilage..
2001
2002
2003 Drainage of septal abscess or hematoma .....
2004
2005
2006
2007
2008
2009 Not otherwise classified .....

Excision

2010 Biopsy, soft tissue, nose .....
2011 Excision of nasal polyp(s), one or more, unilateral or bilateral, one or more stages .....
2012 complicated requiring hospitalization .....
2013
2014 Excision or surgical planing of skin of nose for rhinophyma .....
2015
2016 Excision hypertrophic mucosa, turbinate .....
2017 Resection of inferior turbinate (submucous), complete or partial, unilateral or bilateral (independent procedure .....
2018
2019 Not otherwise classified .....

Introduction

2020 Injection of turbinates, therapeutic .....
2021
2022
2023
2024
2025 Injection procedure for paranasal sinuses .....
2026
2027
2028
2029 Not otherwise classified .....

Endoscopy

2030 Removal of intranasal foreign body by rhinoscopy .....
2031 complicated, with general anesthesia .....
2032 by lateral rhinotomy .....
2033
2034
2035
2036
2037
2038
2039 Not otherwise classified .....

TABLE 28 (Continued)

Repair

2040 Rhinoplasty, lateral and alar cartilages and/or elevation of nasal tip .....
2041 complete, external parts including bony pyramid, lateral and alar cartilages, and/or elevation of nasal tip .....
2042 including major septal repair .....
2043
2044 secondary major revision .....
2045 secondary minor revision .....
2046

RESPIRATORY

2047
2048 Submucous resection, classic, nasal septum, with or without cartilage implant .....
2049
2050 Septoplasty (independent procedure) .....
2051 Repair, choanal atresia, intranasal .....
2052 transpalantine .....
2053 Lysis of synechia .....
2054 Repair of oromaxillary fistula .....
2055 with radical antrotomy .....
2056 Repair oronasal fistula .....
2057 Reconstruction, functional, of the internal nose (septal dermatoplasty .....
2058
2059 Not otherwise classified .....

Destruction

2060 Infraction of turbinates, unilateral or bilateral (independent procedure) .....
2061
2062
2063 Cauterization of turbinates, superficial, unilateral or bilateral (independent procedure) .....
2064 intramural, unilateral or bilateral (independent procedure).....
2065
2066
2067
2068
2069 Not otherwise classified .....

Manipulation

2070 Nasal hemorrhage, anterior, control of, unilateral or bilateral, with or without cauterization or anterior packs .....
2071
2072 posterior, with posterior nasal packs, with or without cauterization and/or anterior pack, initial .....
2073 subsequent .....
2074
2075 by ligation of anterior ethmoidal or external carotid artery ....
2076
2077
2078
2079 Not otherwise classified .....

TABLE 29:

Procedures for the Respiratory System, Surgery of the Nose - CRVS 1974

		Unit Value	Follow-up Days†	Basic Anes.‡
INCISION				
30000	Drainage abscess or hematoma (internal approach)	*0.85	0	4.0
	(For external approach, see 10020, 10060, 10140)			
30020	Drainage abscess or hematoma, nasal septum	*0.95	0	4.0
	(For simple furuncle, see 10020)			
	(For lateral rhinotomy, see specific applications such as 30118, 30320)			
EXCISION				
30100	Biopsy, intranasal soft tissue	0.5	7	4.0
	(For biopsy skin of nose, see 11100, 11101)			
30110	Excision polyp(s), nasal, office type procedure	1.0	15	4.0
30115	extensive, requiring hospitalization	2.7	30	4.0
30117	Excision, intranasal lesion, internal approach	BR†		4.0
30118	external approach (lateral rhinotomy)	BR†		4.0
30120	Excision or surgical planing, skin of nose, for rhinophyma	6.7	60	4.0
30124	Excision dermoid cyst, simple, skin, subcutaneous	1.9	30	4.0
30125	complex, under bone or cartilage	BR†		4.0
30130	Excision turbinate, partial or complete	1.3	30	4.0
30140	Submucous resection turbinate, partial or complete	4.8	90	4.0
	(For submucous resection of nasal septum, see 30500)			
30150	Rhinectomy, partial	BR†		4.0
30160	total	BR†		4.0
	(For closure and/or reconstruction, primary or delayed, see 13020-13300, 14060-14300, 15100-15730, 15760, 20900-20910)			
INTRODUCTION				
30200	Injection of turbinate(s), therapeutic	*0.3	0	
30210	Displacement therapy (Proetz type)	*0.1	0	
REMOVAL OF FOREIGN BODY				
30300	Removal of foreign body, intranasal, office type procedure	*0.3	0	4.0
30310	requiring general anesthesia	2.4	7	4.0
30320	by lateral rhinotomy	BR†		4.0
REPAIR				
30400	Rhinoplasty, primary, lateral and alar cartilages and/or elevation of nasal tip	7.7	180	4.0
	(For columellar reconstruction, see 13000 et seq.)			
30410	complete, external parts including bony pyramid, lateral and alar cartilages, and/or elevation of nasal tip	11.0	180	4.0
	(For bone and cartilage grafts and for implants, see 20900-20910, 21210)			
30420	including major septal repair	12.5	180	4.0
30430	Rhinoplasty, secondary, minor revision, established patient	1.7	45	4.0
30440	new patient	6.3	45	4.0
30450	major revision, established patient	BR†		
30460	new patient	BR†		
30500	Submucous resection, nasal septum, classic	5.0	90	4.0
	(For submucous resection of turbinates, see 30140)			
30520	Septoplasty, with or without cartilage implant (independent procedure)	7.7	90	4.0
30540	Repair choanal atresia, intranasal	7.2	60	4.0
30545	transpalatine	13.5	365	4.0
30560	Lysis intranasal synechia	*0.3	0	4.0
30580	Repair fistula, oromaxillary	6.7	90	4.0
	(Combine with 31030 if antrotomy is included)			
30600	oronasal	BR†		4.0
30620	Reconstruction functional, internal nose (septal or other intranasal dermatoplasty)	BR†		4.0
DESTRUCTION				
30800	Cauterization turbinates unilateral or bilateral, superficial (independent procedure)	*0.3	0	4.0
30805	intramural	0.7	7	4.0
OTHER PROCEDURES				
30900	Control hemorrhage nasal, anterior (unilateral or bilateral, with or without cauterization or anterior packs)	*0.3	0	
30905	posterior (with posterior nasal packs, with or without cauterization and/or anterior pack), initial	*1.3	0	4.0
30906	subsequent	*1.3	0	4.0
30915	Ligation ethmoidal arteries	6.7	30	4.0
30920	Ligation, transantral, internal maxillary artery	RNE°	30	4.0
	(For ligation external carotid artery, see 37600)			
30999	Unlisted procedure on nose	NR†		NR†

TABLE 30:

Procedures for the Respiratory System - Surgery of the Nose - CPT-4

INCISION

30000 Drainage abscess or hematoma, nasal, internal approach

(For external approach, see 10020, 10060, 10140)

30020 Drainage abscess or hematoma, nasal septum

(For lateral rhinotomy, see specific application, eg, 30118, 30320)

EXCISION

30100 Biopsy, intranasal

(For biopsy skin of nose, see 11100, 11101)

30110 Excision, nasal polyp(s); office type procedure

30115 extensive, requiring hospitalization

30117 Excision, intranasal lesion; internal approach

30118 external approach (lateral rhinotomy)

30120 Excision or surgical planing of skin of nose for rhinophyma

30124 Excision dermoid cyst, nose; simple, skin, subcutaneous

30125 complex, under bone or cartilage

30130 Excision turbinate, partial or complete

30140 Submucous resection turbinate, partial or complete

(For submucous resection of nasal septum, see 30500)

30150 Rhinectomy; partial

30160 total

(For closure and/or reconstruction, primary or delayed, see Integumentary System, 13150-13152, 14060-14300, 15120-15730, 15760, 20900-20910)

INTRODUCTION

30200 Injection into turbinate(s), therapeutic

30210 Displacement therapy (Proetz type)

REMOVAL FOREIGN BODY

30300 Removal foreign body, intranasal; office type procedure

30310 requiring general anesthesia

30320 by lateral rhinotomy

TABLE 30 (Continued)

REPAIR

(For obtaining tissues for graft, see 20900-20926, 21210)

30400 Rhinoplasty, primary; lateral and alar cartilages and/or elevation of nasal tip

(For columellar reconstruction, see 13150 et seq)

30410 complete, external parts including bony pyramid, lateral and alar cartilages, and/or elevation of nasal tip

30420 including major septal repair

30430 Rhinoplasty, secondary; minor revision

30450 major revision

30500 Submucous resection nasal septum, classic

(For submucous resection of turbinates, see 30140)

30520 Septoplasty with or without cartilage implant (separate procedure)

30540 Repair choanal atresia; intranasal

30545 transpalatine

30560 Lysis intranasal synechia

30580 Repair fistula; oromaxillary (combine with 31030 if antrotomy is included)

30600 oronasal

30620 Reconstruction, functional, internal nose (septal or other intranasal dermatoplasty) (does not include obtaining graft)

30630 Repair nasal septal perforations

DESTRUCTION

30800 Cauterization turbinates, unilateral or bilateral (separate procedure); superficial

30805 intramural

30820 Cryosurgery of turbinates, unilateral or bilateral

OTHER PROCEDURES

30900 Control hemorrhage, nasal, with or without cauterization

or anterior packs; anterior, unilateral or bilateral

30905 posterior, initial, with posterior nasal packs

30906 posterior, subsequent, with posterior nasal packs

30915 Ligation arteries; ethmoidal

30920 internal maxillary artery, transantral

(For ligation external carotid artery, see 37600)

30999 Unlisted procedure, nose

The several levels are generally similar among the systems, but there is a fair amount of difference in the groupings of procedures within categories; there is considerable variation in wording of procedures; and there is wide variation in number of procedures. The degree of variability differs from one body system to another.

Anesthesia

CPT-4 provides that charges for Anesthesia are to be calculated by coding a time value in addition to a basic procedure value. The code to be reported in the claim for reimbursement is the surgical procedure, its code, plus a two-digit modifier. Seven modifiers are provided which identify a variety of attendant circumstances bearing on the services required of the anesthesiologist.

A set of 33 time codes is specified for identifying and reporting the time.

Much the same arrangement is provided by the CRVS and 74 specific time codes are specified.

Blue Shield provides that payment may be based on "time", on the surgical procedure, or on "time plus procedure". It recommends a relative value scale promulgated by the American Society of Anesthesiologists, 1970 edition.

Radiology

Radiology is a rapidly growing and changing field. The three systems vary somewhat in organization of categories, and the categories as well as numbers have shifted from one edition to the next. CPT-4 and CRVS 1974 use the following major categories:

- Diagnostic Radiology
- Diagnostic Ultrasound
- Radio (Radiation) Therapy
- Nuclear Medicine

    - diagnostic
    - therapeutic.

Subcategories are not identical and differ in number of tests and procedures. CPT-4 lists 604 procedures against 421 for CRVS 1974.

Blue Shield covers much the same total field, but follows an almost completely different pattern of organization for its 409 procedures.

Table 31 summarizes the number of procedures (tests) listed by the three systems in the categories as used in the respective manuals. Clearly, a given procedure or test may sometimes be classified differently in one system than in another.

There is a high degree of similarity in content of the Blue Shield X-Ray Diagnostic Examinations and the Diagnostic Radiology of CPT-4 and CRVS 1974. However, the nomenclature used in the table is that used in the Manuals.

A comparison of the Radiology procedures for the GI Tract is presented in Tables 32, 33, and 34 as an illustration of the patterns used by the three systems. A high degree of similarity is evident.

Pathology

Pathology is also a rapidly growing and rapidly expanding field. As in Radiology, the subject matter is organized somewhat differently in the three systems. Similarities and contrasts can be seen most effectively in the accompanying table (Table 35).

Some of the differences are clearly differences in classification, e.g., a number of tests listed in blood and urine examination in Blue Shield are listed under Chemistry and Toxicology by CPT-4 and CRVS 1974.

SUMMARY

The development of third party payment systems for reimbursing providers of medical services on a fee-for-service basis brought a need for systematic communication between the third party payers and physicians in the matter of services rendered and fees. Guides for third party payments originated primarily in connection with in-hospital surgery and related services, but have now been expanded to cover virtually the full range of medical services. These guides have become known as Medical Procedural Terminology Systems.

Three major national systems have evolved from the experience of a score or more years. In the preparation of this report, all editions of each of the three systems have been utilized, namely:

1. The 1970 Blue Shield Coding and Nomenclature Manual, 1971 Edition, updated to January 1978 and predecessors, the 1962 and 1964 editions of the Blue Shield Professional Services Index. The Blue Shield system is

TABLE 31:

Number of Radiology Procedures, by Major Categories - Three Terminology Systems

	Blue Shield	CPT-4	CRVS 1974
X-Ray Diagnostic Examinations	326		
Nuclear Medicine	83	116	106
Diagnostic Radiology		377	237
Diagnostic Ultrasound		47	35
Radio (Radiation) Therapy	___	64	43
TOTAL	409	604	421

TABLE 32:

Radiology of the Gastro-Intestinal Tract - Blue Shield

Gastro-Intestinal Tract

7335 Pharynx and/or cervical esophagus .....
by cineradiography (add 7570)
7336 Esophagus .....
7337 Gastrointestinal tract, upper, with or without delayed films, without KUB, with or without fluoroscopy .....
7338 with or without delayed films, with KUB, with or without fluoroscopy .....
7339 with Small Bowel, includes multiple serial films, with or without fluoroscopy .....
7340
7341 Small Bowel, includes multiple serial films (independent procedure) .....
7342 Duodenography, hypotonic .....
7343
7344 Colon, barium enema .....
7345 barium enema with air-contrast .....
7346 air-contrast only .....
7347 high voltage technique, for polyp study .....
7348 Cholecystography, oral contrast .....
7349 additional or repeat examination or multiple day examination..
7350 Cholangiography, operative .....
7351 post-operative .....
7352 intravenous .....
7353 oral contrast .....
7354 Cholangiography, percutaneous, transhepatic, supervision and interpretation only .....
(Complete procedure 7354 and 3610)
7355 Cholangiopancreatogram (complete procedure 7355 and 3228)....
7356
7357 Cholangiography, intravenous, slow drip .....
7358 Pneumoperitoneum, diagnostic, supervision and interpretation only .....
(Complete procedure 7358 and 3730)
7359 Not Otherwise Classified .....

TABLE 33:

Radiology of the Gastro-Intestinal Tract - CRVS 1974

GASTRO-INTESTINAL TRACT

74210	Pharynx and/or cervical esophagus
74220	Esophagus
74230	Pharynx and/or esophagus, by cineradiography
74242	Upper gastrointestinal tract, with or without KUB and with or without delayed films
74243	limited upper gastrointestinal tract (e.g., recheck or follow-up study)
74245	with small bowel, includes multiple serial films, with or without fluoroscopy
74250	Small bowel, includes multiple serial films with or without fluoroscopy or KUB, independent study
74260	Duodenography, hypotonic
74270	Colon, barium enema
74275	combined with air contrast
74280	air contrast (independent procedure)
74290	Cholecystography, oral
74291	repeat examination, same study
74300	Cholangiography, operative
74305	post-operative (t-tube) (For biliary duct stone extraction, see 47630)
74310	intravenous
74320	percutaneous, transhepatic, or transjugular (For injection procedures for transhepatic cholangiography or percutaneous, see 47500; for transjugular, see 91120)
74325	Pneumoperitoneum, diagnostic (For injection procedure, see 49400)
74340	Localization and/or manipulation of gastrointestinal tube (e.g., diodenal aspiration, Miller-Abbot tube, small bowel biopsy, colonoscopy)
74399	Unlisted procedure, abdomen and gastrointestinal tract.

TABLE 34:

Radiology of the Gastro-Intestinal Tract - CPT-4

74210 Radiologic examination; pharynx and/or cervical esophagus

74220 esophagus

74230 Cineradiography, pharynx and/or esophagus

74240 Radiologic examination, gastrointestinal tract, upper; with or without delayed films, without KUB

74241 with or without delayed films, with KUB

74245 with small bowel, includes multiple serial films

74250 Radiologic examination, small bowel, includes multiple serial films

74260 Duodenography, hypotonic

74270 Radiologic examination, colon; barium enema

74275 barium enema with air contrast

74280 air contrast only

74285 high kilovoltage technique for polyp study

74290 Cholecystography, oral contrast;

74291 additional or repeat examination or multiple day examination

74300 Cholangiography; operative

74305 postoperative

(For biliary duct stone extraction, percutaneous, see 47630; via basket catheter, see 74327)

74310 intravenous

74315 oral contrast

74320 Cholangiography, percutaneous, transhepatic; supervision and interpretation only

74321 complete procedure

(For injection procedure only for transhepatic cholangiography or percutaneous, see 47500)

74325 Diagnostic pneumoperitoneum; supervision and interpretation only

74326 complete procedure

(For injection procedure only for pneumoperitoneum, see 49400)

•**74327** **Postoperative biliary duct stone removal, fluoroscopic monitoring and radiography**

TABLE 34 (Continued)

•**74328** Endoscopic catheterization of the biliary ductal system, fluoroscopic monitoring and radiography

•**74329** Endoscopic catheterization of the pancreatic ductal system, fluoroscopic monitoring and radiography

•**74330** Combined endoscopic catheterization of the biliary and pancreatic ductal systems, fluoroscopic monitoring and radiography

74340 Introduction of long gastrointestinal tube (eg, Miller-Abbott), with multiple fluoroscopies and films

TABLE 35:

Pathology and Laboratory - Number of Tests (Procedures) - Three Terminology Systems

	CPT-4	CRVS 1974	Blue Shield
Multichannel Tests			
Automated	13	7	14
Semi-automated			7
Urinalysis (urine exams)	10	8	145
Chemistry and Toxicology	567	449	
Hematology	117	111	75
Immunology	155	135	87
Microbiology	48	48	24
Anatomic Pathology			22
Postmortem exam	16	15	
Cytopathology	11	11	
Cytogenic study	10	10	
Surgical Pathology	21	20	
Test Combinations		3	
Miscellaneous	32	24	17
Blood Exams			250
Feces Exams			10
Gastric and Duodenal Content Exams			18
Spinal Exams			12
Sputum Exams			5
Tissue Exams			17
TOTAL	1,000	841	703

essentially a synthesis of many State or local Blue Shield systems, some of which date from the 1940s (NABSP).

2. The California Relative Value Studies (CRVS), issued by the California Medical Association. There are six editions, dated 1956, 1957, 1960, 1964, 1969, and 1974.

3. The Current Procedural Terminology (CPT), issued by the American Medical Association. There are four editions, dated 1966, 1970, 1973, and 1977, identified as CPT-1, CPT-2, CPT-3, and CPT-4.

The actual paying agencies -- Blue Shield Plans, insurance companies, or other Carriers -- either use their own procedural terminology systems or modify one of the national systems to meet what they conceive to be the local requirements of their areas. In practice, local systems are for the most part patterned after one of the national systems, most commonly Blue Shield 1971 or CRVS 1964, with up-dating.

Although the three systems have much in common, they nevertheless vary considerably in detail, with resultant complications for national programs of record keeping, billing, and payment procedures incident to providing and paying for medical services.

The main body of this report has described in considerable detail the development of the systems, basing the discussion mainly on the CRVS in its six editions, and has identified the principal similarities and differences among the three systems.

The historical development has been characterized by three closely related factors, (a) expansion in number of coded procedures, (b) addition of new procedures to accommodate developments in medical practice, and (c) description in greater detail and with greater precision of the services provided by the physicians with resultant fractioning of many procedures.

Principal similarities and differences among the systems are recapitulated below.

1. The use of the same major medical practice categories as the highest order in the classification hierarchy, namely:

   a) Medicine
   b) Anesthesia
   c) Surgery
   d) Radiology and nuclear medicine
   e) Pathology and Laboratory.

2. The use of the same basic components:

   a) verbal descriptor of each procedure
   b) numeric code
   c) anatomical sub-categories of surgery.

3. A general relation to fee schedules.

4. Continuing expansion in number of coded procedures.

5. The use of Modifiers or Type of Service Codes to supplement the numerical procedure codes.

   The Modifiers serve two distinct and different purposes:

   a) to identify an Anesthesiologist, Assistant Surgeon, Co-surgeon, or Concurrent Care for surgical procedure to distinguish the claim for the surgical procedure from that for any of the above, and

   b) to identify a variety of circumstances that may justify or explain unusually high or low charges for a procedure.

6. Use of place of encounter, type of patient (new, old, age) and intensity of level of service as part of procedure descriptors for Visits (Medicine).

7. In Surgery, the use of the same basic hierarchy of classification, e.g.:

   Major category (integumentary, cardiovascular, digestive, etc. systems)

      Minor category (skin, mucous membrane -- tissues, bones)

         Surgical category (incision, excision, repair, etc.)

            Surgical subcategory (debridement, skin graft, etc.)

               Descriptors of individual procedures.

   Although the several levels are generally similar among the systems, there is a fair amount of difference in

the grouping of procedures within categories, in wording of procedures, in number of procedures. The degree of variability differs from one body system to another.

8. For all the major medical services except Anesthesia, the reimbursement scale (express or implied) is closely related to the description of precisely what service the physician provides to the patient. For Anesthesia the fee schedule is tied to:

   a) the surgical procedure to which the anesthesia relates, and

   b) a time factor.

Major differences among the three systems:

1. The CPT and CRVS are physician-developed and controlled; NABSP is insurer-developed and controlled.

2. The Blue Shield system evolved as a synthesis of State or local Blue Shield fee systems, some of which date from the 1940s. The CRVS emphasized as a proper basis for fee schedules the need for uniform nomenclature, standardized code system, relative values, and correct segmentation. The CPT emphasized standard terms, provisional eponyms and descriptors expedite reporting of diagnostic and therapeutic procedures.

3. The CPT-4 listed 6132 coded procedures (excluding Modifiers, Special Billing Procedures, and Anesthesia), the CRVS 1974 listed 5490, and the NABSP listed 4389.

4. CPT-4 and CRVS 1974 use a five-digit code with many procedures identically numbered and described; NABSP uses a 4-digit code.

5. CPT-4 and CRVS 1974 use a system of 2-digit suffixes to procedure codes to identify Modifiers; NABSP uses Type of Service Codes (some numerical and some alphabetical) to accomplish some of the same purposes of the Modifiers.

6. The CRVS has used throughout all six editions the concept of Relative Value scales. However, the Federal Trade Commission issued a consent order in March of 1978 barring the California Medical Association

(CMA) from publishing or developing relative value studies and requiring the withdrawal of studies already published.

CPT has never included relative values nor a fee schedule.

The Blue Shield Professional Services Index, as published in 1962 and 1964 (forerunners of the 1970 Coding and Nomenclature Manual), carried indices which paralleled in purpose the relative values of CMA. The 1970 Coding and Nomenclature Manual, as updated, omits the Professional Services Indices.

7. Although each system includes the concept of the Surgery "package", only the CRVS specifies that the "package" consists of an immediate pre-operative visit and a specified number of follow-up days of care that varies according to procedure. The NABSP Manual carries the general statement "Operative Procedures and Fracture Care automatically includes anesthesia administered by the surgeon, pre- and post-operative care, and usual after care."

   CPT-4 carries as one of its surgical guidelines:

   > "LISTED SURGICAL PROCEDURES include the operation per se, local infiltration, digital block or topical anesthesia when used, and the normal, uncomplicated follow-up care. This concept is referred to as a 'package' for surgical procedures."

8. All three systems use the same set of adjectives to designate the intensity level of the Visit encounter. However, their verbal definitions of the several adjectives differ. NABSP and CRVS both use fairly simple definitions. CPT-4 uses somewhat more detailed descriptions, usually with examples.

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